

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: J. H. Geller Examiner #: 76-416 Date: 10/5/01  
 Art Unit: 7643 Phone Number 305.8053 Serial Number: 09/735 861  
 Mail Box and Bldg/Room Location: \_\_\_\_\_ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Using steam in an orchard to irrigate  
vineyard. to cultivate  
crops

STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher:		NA Sequence (#)	STN _____
Searcher Phone #:		AA Sequence (#)	Dialog _____
Searcher Location:		Structure (#)	Questel/Orbit _____
Date Searcher Picked Up:		Bibliographic	Dr. Link _____
Date Completed:		Litigation	Lexis/Nexis _____
Searcher Prep & Review Time:		Fulltext	Sequence Systems _____
Clerical Prep Time:		Patent Family	WWW/Internet _____
Online Time:		Other	Other (specify) _____

show files;ds  
File 350:Derwent WPIX 1963-2001/UD,UM &UP=200151  
    (c) 2001 Derwent Info Ltd  
File 344:CHINESE PATENTS ABS APR 1985-2001/Jul  
    (c) 2001 EUROPEAN PATENT OFFICE  
File 347:JAPIO OCT 1976-2001/May(UPDATED 010905)  
    (c) 2001 JPO & JAPIO  
File 371:French Patents 1961-2001/BOPI 200134  
    (c) 2001 INPI. All rts. reserv.

Set	Items	Description
S1	543	AU=BROWN C?
S2	1	AGRICULT? AND STEAM? AND S1
S3	169744	STEAM?
S4	2543216	SUPERHEAT? OR HEAT? OR HOT? OR BOIL?
S5	3850	ARGRICULTURE? OR VINEYARD? OR VINE()YARD? OR FRUITTREE? OR FRUIT(3N)TREE?
S6	48918	KILL OR KILLING OR EXTERMINAT? OR DESTROY? OR KILLS
S7	64034	PEST OR PESTS OR INSECT? OR NEMATODE? OR VERMIN?
S8	2991	GRAPE(3N)VINE? OR STRAWBERR?
S9	6	<u>S3</u> AND ( <u>S5</u> OR <u>S8</u> ) AND <u>S</u>

2/7/1 (Item 1 from file: 350)  
 DIALOG(R)File 350:Derwent WPIX  
 (c) 2001 Derwent Info Ltd. All rts. reserv.

012346097 \*\*Image available\*\*

WPI Acc No: 1999-152204/199913

Superheated \*\*steam\*\* delivery appts. for \*\*agriculture\*\* to kill pests and defoliate basal leaves on grape vine or strawberries - has water converted into \*\*steam\*\* in one chamber, with \*\*steam\*\* being superheated in second chamber and delivered to plant via nozzle

Patent Assignee: BROWN C E (BROW-I)

Inventor: \*\*BROWN C E\*\*

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5867935	A	19990209	US 96642534	A	19960503	199913 B

Priority Applications (No Type Date): US 96642534 A 19960503

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5867935	A	14	A01G-007/00	

Abstract (Basic): US 5867935 A

The appts. includes a portable frame, a water reservoir mounted on the frame, and a fluid passageway carried on the frame. A chamber is disposed along the passageway downstream of the reservoir, with the chamber including a heater operable to convert water flowing from the reservoir and through the chamber into \*\*steam\*\*.

A second chamber is disposed along the fluid passageway in which \*\*steam\*\* is superheated. An outlet e.g. a nozzle is adapted to deliver a flow of superheated \*\*steam\*\* from the second chamber.

ADVANTAGE - Enables killing of undesired organisms e.g. nematodes within the soil aswell as pests above ground level.

Dwg.1,2/8

Derwent Class: P13; Q72; X25

International Patent Class (Main): A01G-007/00

International Patent Class (Additional): A01G-011/00; F22G-003/00

?

2/7/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2001 Derwent Info Ltd. All rts. reserv.

012346097 \*\*Image available\*\*

WPI Acc No: 1999-152204/199913

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show files;ds  
File 350:Derwent WPIX 1963-2001/UD,UM &UP=200151  
    (c) 2001 Derwent Info Ltd  
File 344:CHINESE PATENTS ABS APR 1985-2001/Jul  
    (c) 2001 EUROPEAN PATENT OFFICE  
File 347:JAPIO OCT 1976-2001/May(UPDATED 010905)  
    (c) 2001 JPO & JAPIO  
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S1	543	AU=BROWN C?
S2	1	AGRICULT? AND STEAM? AND S1
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9/7/1 (Item 1 from file: 350)  
 DIALOG(R)File 350:Derwent WPIX  
 (c) 2001 Derwent Info Ltd. All rts. reserv.

013844527

WPI Acc No: 2001-328740/200134

**Method for making a dough product e.g. bagel, soft pretzel, sticky bun involves baking raw dough compositions without restraints followed by compressing**

Patent Assignee: PILLSBURY CO (PILL )

Inventor: CICHA D R; CORCORAN K M; GALUSKA P; HAYES-JACOBSON S M; MICHAELS J P; NELSON H L; PATTERSON D L; SCHMELZER J M; WALKER C C

Number of Countries: 093 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200132024	A1	20010510	WO 2000US30081	A	20001101	200134 B
AU 200114511	A	20010514	AU 200114511	A	20001101	200149

Priority Applications (No Type Date): US 99432946 A 19991103

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200132024 A1 E 57 A21D-013/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200114511 A A21D-013/00 Based on patent WO 200132024

Abstract (Basic): WO 200132024 A1

NOVELTY - Preparation of a dough product (optionally filled) involves baking a raw dough composition (optionally filled) comprising flour, water and an active yeast culture without restraints and then compressing the baked dough composition.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a baked filled dough product (A) comprising a yeast leavened dough holding a filling, and having thickness of 10 - 20 mm; and  
 (2) preparation of a raw filled dough composition involving i) sheeting the dough to produce a top dough sheet having venting openings and a bottom dough sheet; ii) depositing a filling on the bottom dough sheet; iii) placing the top dough sheet on top of the bottom dough sheet; and iv) crimping and cutting to form the raw filled dough composition.

USE - For making baked filled and compressed food products e.g. bagels, soft pretzels, french bread, rye bread and sticky buns.

ADVANTAGE - The crust of the dough product has a dense, chewy texture and sheen and is fat free. The products are also simple and easy to prepare. The dough products can be stored for long period of time e.g. frozen. The dough products are made sufficiently thin to fit into a standard pop-up toaster, to be reheated quickly in a toaster so that the product including filling, if present, can attain a desirable temperature prior to consumption. The baking is done without any restraining devices due to which the dough is allowed to expand completely. As the dough composition possesses vent openings particularly in the upper sheet, the compression can be done without formation of undesirable wrinkles in the dough product and without \*\*destroying\*\* the desirable textural features of the product.

pp; 57 DwgNo 0/0

Derwent Class: D11; D16

International Patent Class (Main): A21D-013/00

International Patent Class (Additional): A23G-003/00

9/7/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

012346097 \*\*Image available\*\*

WPI Acc No: 1999-152204/199913

Superheated \*\*steam\*\* delivery appts. for agriculture to \*\*kill\*\* pests and defoliate basal leaves on \*\*grape\*\* \*\*vine\*\* or \*\*strawberries\*\* - has water converted into \*\*steam\*\* in one chamber, with \*\*steam\*\* being superheated in second chamber and delivered to plant via nozzle

Patent Assignee: BROWN C E (BROW-I)

Inventor: BROWN C E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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Priority Applications (No Type Date): US 96642534 A 19960503

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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Abstract (Basic): US 5867935 A

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ADVANTAGE - Enables \*\*killing\*\* of undesired organisms e.g. nematodes within the soil aswell as pests above ground level.

Dwg.1,2/8

Derwent Class: P13; Q72; X25

International Patent Class (Main): A01G-007/00

International Patent Class (Additional): A01G-011/00; F22G-003/00

9/7/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012263225 \*\*Image available\*\*

WPI Acc No: 1999-069331/199906

Treatment of plants or fields with superheated \*\*steam\*\* - generated in two stages with water droplets removed between two stages

Patent Assignee: BROWN C E (BROW-I)

Inventor: BROWN C E

Number of Countries: 081 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5848492	A	19981215	US 96642534	A	19960503	199906 B
			US 97958073	A	19971027	
WO 9921418	A1	19990506	WO 98US793	A	19980114	199925
AU 9860264	A	19990517	AU 9860264	A	19980114	199939
EP 967861	A1	20000105	EP 98903513	A	19980114	200006
			WO 98US793	A	19980114	
NZ 335032	A	20001222	NZ 335032	A	19980114	200104
			WO 98US793	A	19980114	

Priority Applications (No Type Date): US 97958073 A 19971027; US 96642534 A 19960503

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 5848492 A 14 A01M-015/00 CIP of application US 96642534

WO 9921418 A1 E A01M-015/00

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9860264 A A01M-015/00 Based on patent WO 9921418

EP 967861 A1 E A01M-015/00 Based on patent WO 9921418

Designated States (Regional): ES FR IT

NZ 335032 A A01M-013/00 Based on patent WO 9921418

Abstract (Basic): US 5848492 A

\*\*Steam\*\* containing water droplets is generated in a first generator (24). The droplets are removed (26) to form saturated \*\*steam\*\* free of water droplets. This is heated in a second generator (28) to at least 300 deg. F to form superheated \*\*steam\*\*. Sufficient of the superheated \*\*steam\*\* is delivered to soil in a field to \*\*kill\*\* undesired organisms. Also claimed is a method for defoliating \*\*grape\*\* \*\*vines\*\* by generating a flow of superheated \*\*steam\*\* which is delivered to basal leaves adjacent developing grapes. Also claimed is a method of treating raisin grapes or prune plums by delivering a flow of superheated \*\*steam\*\*.

USE - Superheated \*\*steam\*\* is used in the field for fumigating, weeding, defoliating and drying, the \*\*steam\*\* being selectively delivered above and/or below the soil with a portable apparatus.

Organisms \*\*destroyed\*\* may be insects or nematodes.

ADVANTAGE - The \*\*steam\*\* can be delivered in sufficiently large volumes to treat soil in the field. When used on crops, it does not damage ripening fruits.

Dwg.2/8

Derwent Class: C07; P13; P14

International Patent Class (Main): A01M-013/00; A01M-015/00

International Patent Class (Additional): A01G-011/00; A01G-013/00;

A01M-017/00; A01M-019/00; A01M-021/00; A01M-021/04; A01N-025/18;

A23B-007/14

9/7/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009718665 \*\*Image available\*\*

WPI Acc No: 1993-412218/199351

Weeds between \*\*vineyard\*\* rows \*\*destroying\*\* device - has vessel fitted with attachment regulating air pressure and having elastic tank shaped as ball

Patent Assignee: AZERB AGRIC MECH ELECTRIF INST (AZAG-R)

Inventor: ALIEV T I; KULIEV G YU; MAMEDOV N A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1780676	A1	19921215	SU 4756906	A	19891110	199351 B

Priority Applications (No Type Date): SU 4756906 A 19891110

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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SU 1780676 A1 3 A01M-021/04

Abstract (Basic): SU 1780676 A

The device is now fitted with a vertical movement mechanism for tank (13) and vapour producer (4). It is designed as rods (9,10) having conical heads (11,12) and rigidly attached to the frame (1). A water level regulator (2) has a bushing (14) arranged on the bottom (15) of the vessel (3), and a ram (16) installed in the bushing.

USE/ADVANTAGE - In agricultural machinery industry. For \*\*destroying\*\* weeds in orchards and \*\*vineyards\*\* by using \*\*steam\*\* burns.. Higher efficiency. Bul.46/15.12.92

Dwg.1/2

Derwent Class: P14

International Patent Class (Main): A01M-021/04

9/7/5 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2001 JPO & JAPIO. All rts. reserv.

05346215

EXPELLENT FOR MITES

PUB. NO.: 08-301715 [JP 8301715 A]

PUBLISHED: November 19, 1996 (19961119)

INVENTOR(s): HARA MASAHIKO

OKADA FUMIO

APPLICANT(s): MITSUI NORIN KK [403514] (A Japanese Company or Corporation),  
JP (Japan)

APPL. NO.: 07-131200 [JP 95131200]

FILED: May 02, 1995 (19950502)

#### ABSTRACT

PURPOSE: To obtain an expellant for mites parasitic on agricultural products, flowers and ornamental plants, \*\*fruit\*\* \*\*trees\*\* ; etc., containing a natural laurel oil, etc., used as a daily flavoring agent, etc., as an active ingredient, nontoxic to humans and livestock and utilizable without any unfavorable effects of environmental pollution.

CONSTITUTION: A plucked branch or leaf of a laurel is dried to carry out \*\*steam\*\* distillation. The resultant natural laurel oil, etc., is utilized as an active ingredient. Furthermore, the ingredient is dissolved in solvents used as a food additive or for processing foods or the solubility is improved with a surfactant and the solution is further diluted to a prescribed concentration with water. The prepared solution is sprayed on mites to manifest remarkable effects on control of imagoes and \*\*extermination\*\* of larvae. Ethanol and methanol are preferred as the solvents and the concentration thereof is preferably 1-70%. The expellant for the mites is diluted with water in use and sprayed thereon. The dilution is preferably carried out at a ratio so as to provide 0.1-5.0% concentration of the laurel oil. Tetranychus kanzawai, Acaphylla theae Watt et Mann, Panonychus citri, Aculops lycopersici Massee, mites of the family Tarsonemidae, etc., are cited as the mites and the expellant is effective against insects of the family Aleyrodidae, Sitophilus zeamais, etc.

9/7/6 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2001 JPO & JAPIO. All rts. reserv.

05178423

EXPELLENT FOR APHIDS

PUB. NO.: 08-133923 [JP 8133923 A]

PUBLISHED: May 28, 1996 (19960528)

INVENTOR(s): HARA MASAHIKO  
SHIRAKI MAYUMI  
ONO MASANOBU  
SETO RYUTA  
OKADA FUMIO

APPLICANT(s): MITSUI NORIN KK [403514] (A Japanese Company or Corporation),  
JP (Japan)

APPL. NO.: 06-290360 [JP 94290360]

FILED: November 01, 1994 (19941101)

#### ABSTRACT

PURPOSE: To obtain a chemical for \*\*exterminating\*\* aphids, comprising a laurel oil obtained by subjecting laurel to \*\*steam\*\* distillation as an active ingredient, by dissolving the laurel oil in a solvent useful for a food additive or food processing or improving its solubility with a surfactant and diluting it with water.

CONSTITUTION: Leaves and branches of laurel are dried, ground and subjected to \*\*steam\*\* distillation to give a laurel oil. The obtained laurel oil is dissolved in a proper solvent such as ethanol and optionally diluted with water properly to give an repellent for aphids. Since the laurel oil contains cineole, eugenol, etc., a leaf oil of *Cercidiphyllum japonicum* Sieb et Zucc or a clove oil containing these components can be used. The repellent for aphids is effective for aphids living in edible crops, vegetables, persimmon, \*\*fruit\*\* \*\*trees\*\* and \*\*trees\*\* for appreciation. The repellent for aphids is suitably applicable to aphids such as *Toxopetra autantii* living in vegetables such as Japanese radish or *Brassica Rapa* var. perves (a kind of Chinese cabbage). The repellent is also effective for acarids, slugs and plant pathogenic filamentous fungi. Agricultural products to which the repellent for aphids is applied have no injury.  
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show files;ds
File 9:Business & Industry(R) Jul/1994-2001/Sep 10
      (c) 2001 Resp. DB Svcs.
File 16:Gale Group PROMT(R) 1990-2001/Sep 11
      (c) 2001 The Gale Group
File 18:Gale Group F&S Index(R) 1988-2001/Sep 11
      (c) 2001 The Gale Group
File 19:Chem. Industry Notes 1974-2001/ISS 200137
      (c) 2001 Amer.Chem.Soc.
File 20:World Reporter 1997-2001/Sep 12
      (c) 2001 The Dialog Corporation
File 50:CAB Abstracts 1972-2001/Aug
      (c) 2001 CAB International
File 54:FOODLINE(R): Market Data 1972-2001/SEP 10
      (c) 2001 LFRA
File 79:Foods Adlibra(TM) 1974-2001/Aug
      (c) 2001 General Mills
File 129:PHIND(Archival) 1980-2001/Sep W1
      (c) 2001 PJB Publications, Ltd.
File 130:PHIND(Daily & Current) 2001/Sep 12
      (c) 2001 PJB Publications, Ltd.
File 148:Gale Group Trade & Industry DB 1976-2001/Sep 11
      (c) 2001 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
      (c) 1999 The Gale Group
File 248:PIRA 1975-2001Sep W4
      (c) 2001 Pira International
File 252:Packaging Sci&Tech 1982-1997/Oct
      (c) 1997 by Fraunhofer-ILV, Germany
File 285:BioBusiness(R) 1985-1998/Aug W1
      (c) 1998 BIOSIS
File 481:DELPHES Eur Bus 95-2001/Aug W4
      (c) 2001 ACFCI & Chambre CommInd Paris
File 583:Gale Group Globalbase(TM) 1986-2001/Sep 11
      (c) 2001 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2001/Sep 11
      (c) 2001 The Gale Group
File 635:Business Dateline(R) 1985-2001/Sep 11
      (c) 2001 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2001/Sep 11
      (c) 2001 The Gale Group

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Set	Items	Description
S1	288868	STEAM?
S2	3651223	SUPERHEAT? OR HEAT? OR HOT? OR BOIL?
S3	84913	ARGRICULTURE? OR VINEYARD? OR VINE()YARD? OR FRUITTREE? OR FRUIT(3N)TREE?
S4	819828	KILL OR KILLING OR EXTERMINAT? OR DESTROY? OR KILLS
S5	694959	PEST OR PESTS OR INSECT? OR NEMATODE? OR VERMIN?
S6	119610	GRAPE(3N)VINE? OR STRAWBERR? OR GRAPEVINE?
S7	53	(S3 OR S4)(S)S1(S)S5
S8	50	RD (unique items)
S9	7	S8/2000:2001
S10	43	S8 NOT S9
?		

10/3,K/1 (Item 1 from file: 9)  
 DIALOG(R)File 9:Business & Industry(R)  
 (c) 2001 Resp. DB Svcs. All rts. reserv.

02581613 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**ENVIRONMENT-AFRICA: COUNTRIES AGREE TO PHASE OUT METHYL BROMIDE**  
**(African countries are trying to develop ways of getting rid of methyl bromide, which is reported to be one of the world's ozone-depleting substances)**

Interpress Service, p N/A

September 14, 1999

DOCUMENT TYPE: Newsletter (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1007

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...like dazomet, dichloropropene and metam sodium, there are several non-chemical techniques, which include integrated \*pest\* management practices such as sanitation, composting, planting of resistant varieties and \*steam\* treatment -- the injection of water vapor of 80 degrees C., in order to \*kill\* soil \*pests\* and diseases.

"All these are viable techniques. Countries are encouraged to identify, evaluate and adapt..."

10/3,K/2 (Item 2 from file: 9)  
 DIALOG(R)File 9:Business & Industry(R)  
 (c) 2001 Resp. DB Svcs. All rts. reserv.

02469953 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Wayne, N.J.-Based Pesticide Maker Sued over Florida Medfly Spray**  
**(Cheminova Inc, Cheminova Agro A/S (Denmark) and Cheminova Holding A/S are sued over Florida's use of Fyfanon ULV pesticide to kill Mediterranean fruit flies in 1997-98)**

Record (The), p N/A

May 12, 1999

DOCUMENT TYPE: Regional Newspaper (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 718

ABSTRACT:

...federal district court in Tampa on Friday over Florida's use of Fyfanon ULV to \*kill\* Mediterranean fruit flies in 1997 and 1998. Lawyers for the plaintiffs -- a half dozen who...

...malaoxon and isomalathion, in temperatures above 77 degrees, and should not have shipped it to \*steamy\* south Florida in the summer of 1997. It also alleges the company should not have...

...or Medfly -- in a kumquat tree in Hillsborough County, Florida, in May 1997. Intent on \*destroying\* the \*pest\*, which officials feared would decimate the state's economically important citrus and tomato crops, the...

10/3,K/3 (Item 1 from file: 16)  
 DIALOG(R)File 16:Gale Group PROMT(R)  
 (c) 2001 The Gale Group. All rts. reserv.

06831928 Supplier Number: 57238319 (USE FORMAT 7 FOR FULLTEXT)  
**Routt National Forest.(Brief Article)**

Denver Business Journal, v51, n9, p16A

Oct 22, 1999

Language: English Record Type: Fulltext

Article Type: Brief Article

Document Type: Magazine/Journal; Trade

Word Count: 77

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Forestry officials near \*Steamboat\* Springs are hoping for a cold snap. The temperature needs to drop down to 49 degrees below zero to \*kill\* off the spruce bark beetle. Officials say the beetle has infested a section of Routt...

...It's too costly to burn the area, clear-cut it or spray it with \*insecticide\*, so the weather may be the only weapon to use against the beetles.

**10/3,K/4 (Item 2 from file: 16)**

DIALOG(R)File 16:Gale Group PROMT(R)

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01913796 Supplier Number: 42438225

**Pfizer Starts Up Advanced Fermentation Pilot Plant**

Chemical & Engineering News, p25

Oct 14, 1991

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Refereed; Academic

ABSTRACT:

...6 miles of stainless steel pipe. Pfizer makes a wide range of fermentation products. Spent \*steam\* used for sterilization is condensed and disinfected. The chief concern is that some organism from...

...center are semduramicin ionophore antibiotic for prevention of coccidiosis and doramectin macrocyclic lactone glycoside to \*kill\* parasitic \*nematodes\*.

**10/3,K/5 (Item 3 from file: 16)**

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2001 The Gale Group. All rts. reserv.

01695128 Supplier Number: 42110263

**Pest Firm Gives Bugs The Shivers**

San Francisco Chronicle (CA), pC1,C4

May 30, 1991

Language: English Record Type: Abstract

Document Type: Newspaper; Trade

ABSTRACT:

Tallon Termite & \*Pest\* Control (Long Beach, CA) is attracting customers who prefer nontoxic \*pest\* control with the company's 'Blizzard System.' The patented \*pest\* control method involves spraying liquid nitrogen into termite-infested wood. Other methods include trapping ants...

...designed to attract ants specifically, and ridding carpets of fleas by spraying them with hot \*steam\*. When the company first introduced its nontoxic system in 1987, competitors were sceptical. But Tallon...

...According to Jay Talon, CEO, the company guarantees its work for 2 years, like other \*exterminators\*.

**10/3,K/6 (Item 1 from file: 20)**

DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

07883403 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Georgetown, Ill., Florist's Business Still Blooming after 90 Years**

Jodi Heckel

KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS (NEWS-GAZETTE - CHAMPAIGN, ILL.)  
October 21, 1999

JOURNAL CODE: KNGC LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 665

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... when Roy and Mary Lou Burgoyne bought it.

One innovation Roy Burgoyne initiated was using \*steam\* sterilization to \*kill\* the weeds, \*insects\* and disease in the soil used in the greenhouses.

Mary Lou Burgoyne said the two...

**10/3,K/7 (Item 2 from file: 20)**

DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

06119429 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Duluth, Minn., to Treat Shippers' Garbage for Port**

Paul Adams

KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS (DULUTH NEWS-TRIBUNE - MINNESOTA )

July 03, 1999

JOURNAL CODE: KDNT LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 677

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... small items.

The U.S. Department of Agriculture requires the waste to be incinerated or \*steamed\* to a temperature of 212 degrees for at least 30 minutes before it can be disposed of in a local landfill. The purpose is to \*kill\* off any foreign \*pests\* or diseases that might pose a risk to local plant or animal species.

Previously, such...

**10/3,K/8 (Item 3 from file: 20)**

DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

06064897 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**China Restores World's Tallest Wooden Buddha**

XINHUA (COMTEX)

July 05, 1999

JOURNAL CODE: WXIN LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 140

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... of 27.21 meters and weighs 110 tons.

Restoration experts reportedly treated the relic with \*steam\* generated by boiling medicinal herbs in order to \*kill\* \*insects\* and used

electric dryers to complete the process.  
A joint team of experts from the...

**10/3,K/9 (Item 4 from file: 20)**  
DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

02747185 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**FRUIT AND VEGETABLES / MINISTRY SETS THREE-YEAR GOAL: Bid to ensure export quality: New programme to help growers**  
from BANGKOK POST (BUSINESS SECTION), Page 10, September 09, 1998  
BANGKOK POST  
September 09, 1998  
JOURNAL CODE: FBKP LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 896

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... and western Europe preferring the frozen product.  
Mr Chavalvut said his department had built a \*steam\* fumigation plant to \*kill\* \*insects\* and their eggs before fruits were exported.  
This would make it easier to ship ripe...

**10/3,K/10 (Item 1 from file: 50)**  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03601778 CAB Accession Number: 982303076  
**Environmental hazards of fumigants: the need for safer alternatives.**  
Wheeler, W. B.; Kawar, N. S.  
IFAS, Food & Environmental Toxicology Laboratory, University of Florida, FL, USA.  
Conference Title: Pesticides and the environment. Proceedings of the Sixth Arab Congress of Plant Protection, Beirut, Lebanon, 27-31 October 1997.  
Arab Journal of Plant Protection vol. 15 (2): p.154-162  
Publication Year: 1997  
ISSN: 0255-983X --  
Language: English Summary Language: arabic  
Document Type: Conference paper; Journal article

--  
... years. A major use is when soil-applied to reduce or eliminate soil borne diseases, \*insects\*, and weeds, which if not controlled would adversely affect the growth and production of agricultural...

... have great advantages in that they effectively penetrate the materials being treated, are efficient in \*killing\* \*pests\* and usually dissipate leaving no hazardous residues. However, fumigants are toxic to humans and animals...

... years. Potential replacements include the use of less hazardous chemicals, non-chemical soil disinfection using \*steam\* or soil solarization, and applying other practices, such as biological control and crop rotation, to reduce \*pest\* infestation.

**10/3,K/11 (Item 2 from file: 50)**  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03553248 CAB Accession Number: 982401409

**Investigations of phase soil cooling.**

Original Title: Dirvos ausimo fazes tyrimai.

Sirvydas, P. A.; Stepanas, A.

Lithuanian University of Agriculture, Raudovaris, 4320 Kauno r., Lithuania.

Zemes Uolio Inzinerija, Mokslo Darbai vol. 29 (2): p.33-42

Publication Year: 1997 --

Language: Lithuanian Summary Language: english; russian

Document Type: Journal article

--  
The majority of plant diseases and \*pests\* are \*destroyed\* at temperatures of 82 deg C. During soil sterilization, soil reaches a temperature of 100...

... falls very slowly. Experimental investigations of phase soil cooling showed that an hour after the \*steam\* is turned off, the temperature of the soil is 97-80 deg C, meaning that...

10/3,K/12 (Item 3 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

03255710 CAB Accession Number: 961608066

**Return to resistance: breeding crops to reduce pesticide dependence.**

Robinson, R. A.

xv + 480 pp.

Publication Year: 1996

Publisher: agAccess -- Davis, California, USA

ISBN: 0-932857-17-5

Language: English

Document Type: Book

--  
...knowledge about these subjects, this book examines how the problem of crop parasites, which currently \*destroy\* about one-fifth of all crop production worldwide, can be largely overcome by breeding crops...

... approach to breeding crops and advocates horizontal resistance as a means of providing a largely \*pest\*-free and pesticide-free agriculture. The book is organized into 3 sections, the first of...

... cartels). The second section gives examples of crops which have been successfully bred to overcome \*pests\* and diseases (including potato, maize, coffee and sugarcane), gives examples of crops which have been...

... in the past for horizontal resistance, and examines why the Green Revolution ran out of \*steam\*. The third section advocates the formation of plant breeding clubs to undertake horizontal resistance breeding...

10/3,K/13 (Item 4 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

03049631 CAB Accession Number: 952306922

**Evaluation of a Swedish steam-dryer for treatment of *Bursaphelenchus xylophilus* in pine chips.**

Dwinell, L. D.; Magnusson, C.; Tomminen, J.

USDA Forest Service, Southeastern Forest Experiment Station, Forestry Sciences Laboratory, 320 Green Street, Athens, GA 30602-2044, USA.

Bulletin OEPP vol. 24 (4): p.805-811  
 Publication Year: 1994  
 ISSN: 0250-8052 --  
 Language: English Summary Language: french; russian  
 Document Type: Journal article

--  
 A \*steam\*-dryer, designed and manufactured in Sweden, was evaluated for \*destroying\* *Bursaphelenchus xylophilus* in pine chips from southern USA. In a trial, pine chips were treated...

...deg C in 5 min at low pressure. Samples of pine chips were assayed for \*nematodes\* in laboratories in USA, Sweden, and Finland. No \*nematodes\* of any species were recovered from any of the treated pine-chip samples. Large and heterogeneous pieces of wood in the treated samples were also \*nematode\* -free. The apparatus was a prototype capable of handling about 400 kg h-1. The...

10/3,K/14 (Item 5 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

02957943 CAB Accession Number: 952300033  
**Diagnosis of apple replant problems in New York orchard soils and evaluation of nematode-suppressive cover crops.**  
 Pruyne, P. T.; Merwin, I. A.; Mullin, P. G.; Gibson, D. M.  
 Department of Fruit and Vegetable Science, Cornell University, Ithaca, NY, USA.  
 Acta Horticulturae (No.363): p.121-128  
 Publication Year: 1994  
 ISSN: 0567-7572 --  
 Language: English  
 Document Type: Conference paper; Journal article

--  
 Nearly half of the \*tree\*-\*fruit\* growers surveyed in New York, USA, reported serious problems in replanting their orchards. Past research...

... alternative treatment strategies for ORD. Several cover crops or cultural practices were evaluated for controlling \*fruit-\*tree\* root pathogens associated with ORD and the mechanisms of \*nematode\* suppression by certain plants were investigated. Soils were sampled from orchards in the major fruit-growing regions of New York, identifying and quantifying plant parasitic \*nematodes\* at each site. ORD was then assessed using a diagnostic bioassay comparing dry weights of apple seedlings grown for 10 weeks in \*steam\*-pasteurized (PS) compared with untreated field soil (FS). Seedling dry weight ratios (PS:FS) ranged...

... non-treated soils, in association with substantial populations of *Pratylenchus penetrans* and/or *Xiphinema* spp. \*nematodes\*. Five ORD soils were selected for further evaluation of the effects of *Tagetes patula* cv ...

...breakdown of each cover crop. Preliminary studies with aqueous leachates showed no significant differences in \*nematode\* mortality in cover crop leachates compared with water controls. This paper was presented at the...

10/3,K/15 (Item 6 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

02603356 CAB Accession Number: 921164970  
**Floral volatiles of Tanacetum vulgare L. attractive to Lobesia botrana Den. et Schiff. females.**  
 Gabel, B.; Thiery, D.; Suchy, V.; Marion-Poll, F.; Hradsky, P.; Farkas, P.  
 Laboratoire de Neurobiologie Comparee des Invertebres, INRA-CNRS (UA 1190), B.P. 23, Bures sur Yvette 91440, France.  
 Journal of Chemical Ecology vol. 18 (5): p.693-701  
 Publication Year: 1992  
 ISSN: 0098-0331 --  
 Language: English  
 Document Type: Journal article

--  
 Lobesia botrana is a major \*pest\* of grapes in Europe. Females are attracted to tansy (*Tanacetum vulgare*), a non-host plant, which is a common weed in Slovakian \*vineyards\*. A \*steam\* distillate extract of tansy flowers was analysed using GC-EAG techniques to screen constituents detected...

... piperitone) produced an EAG response in more than 70% of the females (N = 17). The \*steam\* distillate of tansy, as well as a synthetic blend of identified compounds, released consistent attraction...

... studies using bait traps. The use of nonhost plants and host plant odours in integrated \*pest\* management is discussed.

10/3,K/16 (Item 7 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

02481015 CAB Accession Number: 910655701  
**Subsistence agriculture improvement: manual for the humid tropics.**  
 Haupstr. 9, W-7401 Nehren, Germany.  
 (Ed. 2): xiv + 231 pp.  
 Publication Year: 1990  
 Editors: Goeltenboth, F.; Dalpadado, V. E.; Howcroft, N. H. S.; Louman, B.; Samana, F.; Siki, B.; Nalu, G.  
 Publisher: Wau Ecology Institute -- Wau, Papua New, Guinea  
 ISBN: 9980-73-001-3 (Papua New Guinea); 3-8236-1157-7 (Germany)  
 Language: English  
 Document Type: Book

--  
 ... of a nursery; preparation of compost bricks; production/construction of banana-fibre-pots, a soil-\*steamer\* -drum, an appropriate water-can-baffle, a bamboo-marker, an A-frame and a simple...

... showing the altitudinal limits of crops, and data on the food value, ecology, cultivation, and \*pests\* and diseases of 31 food crops, including vegetables, root crops, \*fruit\* \*trees\* and spices). The last section, 'Information on subsistence agriculture improvement', discusses: subsistence agriculture and soil...

... the main genera used - Casuarina, Albizia, Leucaena, Acacia and Calliandra); simple organic plant protection from \*pests\* and diseases (prevention, using agronomic techniques and resistant plants, and control, using biological and physical...

10/3,K/17 (Item 8 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

02170844 CAB Accession Number: 891122223

**Crickets in the greenhouse.**

Shikov, E. V.

Zashchita Rastenii (Moskva) (No. 3): p.54-55

Publication Year: 1987 --

Language: Russian

Document Type: Journal article

--  
 ... lays up to 170 eggs, and various stages are present simultaneously. In the summer the \*pest\* transfers freely to and from the land outside, especially if it is weedy. Control is aimed at preventing entry of the \*pest\*. All containers are disinfected with a 2% formalin solution or fumigated with a mixture of formalin and potassium permanganate. Soil is \*steamed\* to \*destroy\* the eggs. At the end of cultivation, premises are carefully treated with a 50% Actellic...

10/3,K/18 (Item 9 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

01871581 CAB Accession Number: 870617001

**Heat-treating wood chips: a possible solution to pine wood nematode contamination.**

Kinn, D. N.

SFES, USDA For. Serv., 2500 Shreveport Highway, Pineville, LA 71360, USA.

Tappi Journal vol. 69 (1): p.97-98

Publication Year: 1986

ISSN: 0734-1415 --

Language: English

Document Type: Journal article

--  
 ...various locations in a chip pile in Alabama. All 4 samples were found to contain \*nematodes\*; at least 2 contained the pine wood \*nematode\* *Bursaphelenchus xylophilus* which is responsible for pine wilt disease. Other \*nematodes\* were *Cephaloboides* sp., *Mononchoides* sp., *Rhabdodontolaimus* sp. and species in the family Rhabditidae. Samples of chips were then exposed to dry heat or \*steam\* or immersed in water at temp. ranging from 40 to 135 deg C for different...  
 ...to 135 deg C had to be applied for 8-10 min in order to \*kill\* the \*nematodes\* ; these temperatures are considered too high to be practical and probably have a deleterious effect on chip quality. \*Steam\* heat was successful at lower temp. and for shorter periods (2 min at 85 deg...

10/3,K/19 (Item 10 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

01840945 CAB Accession Number: 870840872

**Survival of *Bursaphelenchus xylophilus* in wood chips.**

Kinn, D. N.

Southern Forest Exper. Sta., USDA Forest Serv., 2500 Shreveport Highway, Pineville, LA 71360, USA.

Bulletin OEPP vol. 16 (3): p.461-464

Publication Year: 1986

ISSN: 0250-8052 --

Language: English Summary Language: french; russian

Document Type: Journal article

--  
Treatments to \*kill\* *B. xylophilus* in infested logs or other material to be exported to areas free of the pinewood \*nematode\* are described. These include dry heat at temperatures of 120-135 deg C for 8-10 min, \*steam\* heat for 2 min at 85 and 90 deg C, 4 min at 80 deg...

**10/3,K/20 (Item 11 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01603893 CAB Accession Number: 850329706

**(Soil) steaming with year-round chrysanthemums. Influence on growth and yield is slight.**

Original Title: Stomen bij jaarrondteelt chrysant. Invloed op groei en produktie gering.

Runia, W. T.; Hoeven, A. P. van der

Proefstation voor de Tuinbouw onder Glas, Naaldwijk, Netherlands.

Vakblad voor de Bloemisterij vol. 39 (34): p.34...37

Publication Year: 1984

ISSN: 0042-2223 --

Language: Dutch

Document Type: Journal article

--  
\*Steaming\* is now the usual method of soil disinfection for Dutch glasshouse growers, following a ban...

...methyl bromide. Data are presented from trials on 4 commercial holdings, investigating the effects of \*steaming\* for 1 or 6 h in uncultivated soil or for 6 h in cultivated soil...

...soils were heavy loams, and one was a light loam and one a clay. With \*steaming\* for 1 h the soil temperature below 10 cm was not raised enough to \*kill\* the soil fungi, but with 6 h of \*steaming\* the soil was effectively disinfected to a depth of 20 cm. The soil Mn content was also raised by \*steaming\* for 6 h, more so in the heavier soils and particularly in cultivated soil. Soil...

... or flower vase life; untreated plots of the 4 soils were not significantly infested with \*nematodes\* or fungi so \*pest\* and disease control could not be assessed in this study.

**10/3,K/21 (Item 12 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01003316 CAB Accession Number: 810580731

**Blumea species (Compositae): insecticides from plants.**

Dongre, T. K.; Rahalkar, G. W.

Biology and Agriculture Division, Bhabha Atomic Research Centre, Trombay, Bombay-40084, Maharashtra, India.

Journal of Communicable Diseases vol. 12 (1): p.39-41

Publication Year: 1980

ISSN: 0019-5138 --

Language: English

Document Type: Journal article

--  
... kerosene and acetone extracts of *B. densiflora* have been tested (although unsuccessfully) against Diptera, the \*insecticidal\* activity of

3 further Blumea species common in the Trombay area of Bombay, India, was  
...

...instar larvae of *Culex quinquefasciatus* Say (*pipiens fatigans* Wied.). An oily residue separated from the \*steam\*-distillate of the leaves of *B. eriantha* gave complete \*kill\* after 24 h at 200 p.p.m., a similar residue from *B. oxydonata* gave...

**10/3,K/22 (Item 13 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00758795 CAB Accession Number: 790854912

**Physical methods of control.**

Southey, J. F.

Plant Path. Lab., Harpenden, Herts, UK.

Plant nematology

p.303-313

Publication Year: 1978

Editors: J.F. Southey

Publisher: HM Stationery Office. -- London, UK

Language: English

Document Type: Miscellaneous

--  
 Heat treatment of soil for \*nematode\* control in protected cultivation includes partial sterilization by \*steam\*, electrical heating, short-wave diathermy and pre-heating and 'cooking-out' of mushroom composts. Hot water treatment, used for \*killing\* \*nematodes\* in infested plant material, usually bulbs, is discussed in detail and hot-air, electrical, radiation...

**10/3,K/23 (Item 14 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00720023 CAB Accession Number: 790374760

**Determining the cause and extent of apple, cherry, and pear replant disease under controlled conditions.**

Mai, W. F.; Abawi, G. S.

Cornell Univ., Ithaca, NY, USA.

Phytopathology vol. 68 (11): p.1540-1544

Publication Year: 1978

ISSN: 0031-949X --

Language: English

Document Type: Journal article

--  
 A replant disease of \*fruit\* \*trees\* was reproduced under growth chamber conditions. Apple, pear and cherry seedlings, grown in nontreated orchard  
...

... plant growth and development over the nontreated check, it was inferior to the chloropicrin and \*steam\* treatments. Growth response of all seedlings to soil treatments was greatest in the apple replant...

...7.2, 5.5 and 5.7. It is considered that the replant disease of \*fruit\* \*trees\* in NY is nonspecific and that biological agents in addition to plant parasitic \*nematodes\* are involved. ADDITIONAL ABSTRACT: This paper reports an investigation of replant disease, which is non-specific and involves several organisms including \*nematodes\*, of apple, pear and

cherry seedlings in New York State, USA. *Pratylenchus*, *Paratylenchus* and *Xiphinema* spp. were the plant parasitic \*nematodes\* most frequently found in the soils. Population densities of *P. penetrans* and *Paratylenchus* (mostly *P...*

... *Xiphinema americanum* populations were larger in cherry than in apple or pear soils. Treatment with \*steam\*, chloropicrin (421 l/ha) or D-D (421 l/ha) reduced \*nematode\* populations and increased plant growth. Treatment with D-D was not as effective against *Paratylenchus* spp. as the other treatments. After 12 weeks of growth of the seedlings \*nematode\* populations remained low in the treated soils.

**10/3,K/24 (Item 15 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00279513 CAB Accession Number: 750822993  
**Studies on the nematodes causing crop losses of cultivated mushroom, *Agaricus bisporus* (Lange) Sing.**  
 Han, Y. S.; Park, J. S.; Kim, D. S.; Shin, K. C.  
 Institute of Agricultural Science, Suweon, S.Korea.  
 Research Reports of the Office of Rural Development, Soil Science,  
 Fertilizer, Plant Protection and Micrology vol. 16 p.35-44  
 Publication Year: 1974 --  
 Language: English Summary Language: korean  
 Document Type: Journal article

-- Extraction and identification of \*nematodes\* from samples of compost and casing material from 35 mushroom farms in South Korea revealed...

... high levels. The effects on the mycelia were considered to be due to accumulation of \*nematode\* excretory products, not to \*nematode\*-induced pH changes. Both *Aphelenchooides* and *Rhabditis* significantly reduced the numbers of fruiting bodies produced. The main sources of the \*nematode\* infestation were found to be the compost and casing materials. Experiments on the thermal death point of *Rhabditis* indicate that \*steam\* sterilization of soil for 30 min. and holding compost at 70 deg C for 6 ...

... survey of 35 mushroom farms showed *Aphelenchooides* sp. and *Rhabditis* sp. to be the commonest \*nematodes\*. Both \*destroyed\* the mushroom mycelium and significantly reduced yields. The main sources of infestation were compost and...

**10/3,K/25 (Item 16 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00245705 CAB Accession Number: 740518464  
**A method to rear *Stomoxys nigra* Macquart (Diptera, Muscidae) in the laboratory.**  
 Ramsamy, M.  
 Ministry of Agriculture and Natural Resources, Mauritius.  
*Revue Agricole et Sucriere de l'Ile Maurice* vol. 51 (4): p.236-241  
 Publication Year: 1972  
 ISSN: 0370-3576 --  
 Language: English Summary Language: french  
 Document Type: Journal article

--

... to 20 parts grass was found to give excellent results. When it was treated with \*steam\* or 0.2% formalin to \*kill\* entomophagous \*nematodes\* of the genus *Rhabditis*, over 60% of larvae reared in it gave rise to adults...

10/3,K/26 (Item 17 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00133293 CAB Accession Number: 740320906  
**Steam sterilization of tomato greenhouse soils.**  
 Farley, J. D.; Oakes, G.; Jaberg, C.  
 Research Summary, Ohio Agricultural Research and Development Center  
 vol. 43 (No. 73): p.21-24  
 Publication Year: 1974 --  
 Language: English  
 Document Type: Journal article

--  
 Soil temperatures during and after winter and summer \*steaming\* were recorded in 9 commercial glasshouses. The critical temperature (140 deg F) to ensure the destruction of \*insect\* \*pests\*, weeds and disease pathogens (apart from TMV) was reached after only 3 h in summer \*steaming\* and after 5 h in winter. During the summer, temperatures of 200 deg or above were reached after 3.5 h and this would be sufficient to \*destroy\* TMV. If TMV-resistant tomato cvs are grown considerable savings in fuel costs can be effected by reducing the \*steaming\* time and covering the treated soil with a tarpaulin to retain the heat.

10/3,K/27 (Item 18 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00068967 CAB Accession Number: 730807803  
**Experiments with fungicides and insecticides in fruit and gardening crops in 1971.**  
 Original Title: Forsoeg med plantebeskyttelsesmidler i frugtavl og gartneri 1971.  
 Hansen, T.; Rasmussen, A. N.; Schadegg, E.  
 State Plant Pathology Inst., Lyngby, Denmark.  
 Tidsskrift for Planteavl vol. 76 (5): p.682-706  
 Publication Year: 1972  
 ISSN: 0040-7135 --  
 Language: Danish Summary Language: english  
 Document Type: Journal article

--  
 ... on *Ficus benjamina*. *Meloidogyne* on cucumbers and tomatoes seemed to be slightly better controlled by \*steaming\* the soil than by treatment with methyl bromide. 'dagger'. ADDITIONAL ABSTRACT: Details are given of tests carried out at the State Plant Pathology Institute, Denmark, in 1971 with fungicides and \*insecticides\* (see preceding abstract) against \*pests\* of fruit and garden crops, including some against *Aphis pomi* Deg. on apple, *Hoplocampa minuta*...  
 ... rubi (Hbst.) on *Cecidophyopsis* (*Eriophyes*) *ribis* (Westw.) on black currant, *Panonychus* (*Metatetranychus*) *ulmi* (Koch) on \*fruit\* \*trees\* and *Tetranychus urticae* Koch on glasshouse crops.

10/3,K/28 (Item 19 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00031139 CAB Accession Number: 730306726

**Studies on the cause of specific replant disease of \*fruit\* \*trees\*. IV.  
The effect of different \*steaming\* temperatures on free-living \*nematodes\*  
in sick soil.**

Original Title: Untersuchungen über die Ursache der Bodenmudigkeit bei  
Obstgehölzen. IV. Einfluss verschiedener Dampftemperaturen auf freilebende  
Nematoden in mudem Boden.

Winkler, H.; Otto, G.

Institut für Obstforschung, Dresden-Pillnitz, German Democratic Republic.

Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene vol. 127 (7/8): p.783-788

Publication Year: 1972 --

Language: German Summary Language: english

Document Type: Journal article

**Studies on the cause of specific replant disease of \*fruit\* \*trees\*. IV.  
The effect of different \*steaming\* temperatures on free-living \*nematodes\*  
in sick soil. --**

10/3,K/29 (Item 20 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00025206 CAB Accession Number: 720301800

**The great wine blight.**

Ordish, G.

237 pp.

Publication Year: 1972

Publisher: -- London, U.K., J.M. Dent & Sons Ltd.,

ISBN: 0460039482

Language: English

Document Type: Book

--

... tiny drop on both occasions, had no remedy been devised for the devastation of vinifera \*vineyards\* by Phylloxera vastatrix. George Ordish tells us all about it from A to Z, starting with the first identification on a European vine of this revolting \*insect\* in a greenhouse at Hammersmith in 1863, it having, thanks to \*steam\* navigation, successfully crossed the Atlantic alive. Next we hear of its devastating effect on the ...

... taken against it, in fact its history to the end. It is indeed a horrible \*insect\* and, at least to one who is not an entomologist, it is not a subject...

... show a certain measure of success was the unpleasant and highly dangerous carbon bisulphide. This \*insecticide\* was, however, evanescent. It killed the \*insect\* and was gone and the vine was back at square one ready for fresh infection...

10/3,K/30 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2001 The Gale Group. All rts. reserv.

10293973 SUPPLIER NUMBER: 20858888 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Filth and food safety.**

Ziobro, George C.

Chemistry and Industry, n11, p428(4)

June 1, 1998

ISSN: 0009-3068 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 2492 LINE COUNT: 00196

Some people consider the contamination of food by \*insects\* or animals simply as aesthetic problems, but our ancient ancestors realised that contaminated food could...

...a creature may fall will be unclean; be it oven or stove, it must be \*destroyed\*. The biblical prohibitions are paralleled by the wisdom in Native American cultures of the New...

...or clothing that have been defiled by rodents. In the Orient, Chinese cooking practices involve \*steaming\*, boiling or frying all foods; very few items are ever served raw. Over the years...

**10/3,K/31 (Item 2 from file: 148)**

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2001 The Gale Group. All rts. reserv.

10163796 SUPPLIER NUMBER: 20161594 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Mining ethical issues: the new prohibitionists.(Cover Story)**

Maxey, Margaret N.

E-MJ - Engineering & Mining Journal, v198, n10, pWW34(5)

Oct, 1997

DOCUMENT TYPE: Cover Story ISSN: 0095-8948 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 4766 LINE COUNT: 00387

... imperiled human health and public safety - and that the quality of our environment has been \*destroyed\* by industrial pollutants and hazardous wastes - we would do well to revisit the historical record...

...on the GRAS list today) or by drying it in the sun where maggots and \*insects\* competed for survival. Women's lives from dawn to dusk were dogged by drudgery. As is the case today, the introduction of new technologies in the past - including the \*steam\* locomotive and even the baby carriage - were greeted with pious outcries protesting against these ominous...

**10/3,K/32 (Item 3 from file: 148)**

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2001 The Gale Group. All rts. reserv.

09325267 SUPPLIER NUMBER: 19099696 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Hot idea for area bugged by fire ants.**

Brezonick, Mike

Diesel Progress Engines & Drives, v62, n12, p44(2)

Dec, 1996

ISSN: 1040-8878 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 869 LINE COUNT: 00066

... burner. Within a matter of seconds, the water is heated to a temperature sufficient to \*kill\* the \*insects\*, usually 210 (degrees) F. The newest models allow temperatures as high as 350 (degrees) F, which also allows the system to generate \*steam\* and hot water that can be used to eliminate unwanted vegetation. "We have found the product is wonderful for weed control," noted Dorsett. "Say when he's not \*killing\* fire ants, a farmer wants to clean up a fence line and doesn't want to use poison. The combination of hot water and \*steam\* works fine to \*kill\* the weeds and

again, there's not the problems that exist with putting poison on...

**10/3,K/33 (Item 4 from file: 148)**  
 DIALOG(R)File 148:Gale Group Trade & Industry DB  
 (c)2001 The Gale Group. All rts. reserv.

06448086 SUPPLIER NUMBER: 13808385 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The wisdom of humble homes. (architecture in India)**  
 Engel, Peter  
 Technology Review, v96, n2, p38(12)  
 Feb-March, 1993  
 ISSN: 0040-1692 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
 WORD COUNT: 5721 LINE COUNT: 00425

... centuries they had taught their children to forage for nuts and berries, to track and \*kill\* wild boar and spotted deer, weave baskets, \*steam\* rice in a section of bamboo, smoke out the inside of a hut to keep it free of mold and \*insects\*, and build an encampment so it would not be attacked by migrating elephants. Along the...

**10/3,K/34 (Item 5 from file: 148)**  
 DIALOG(R)File 148:Gale Group Trade & Industry DB  
 (c)2001 The Gale Group. All rts. reserv.

05815551 SUPPLIER NUMBER: 12013316 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**TOXICOLOGY REVIEW PROMPTS CHANGES IN STRUCTURAL FUMIGATIONS**  
 PR Newswire, 0402A4662  
 April 2, 1992  
 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
 WORD COUNT: 3009 LINE COUNT: 00272

... certain nursery stock be grown on soil treated in an approved manner. This applies to \*fruit\* and nut \*trees\*, grapevines, berry vegetable plants, kiwi and other nursery stock sold for on-farm planting. Since...

...with methyl bromide under tarp. (Soil in beds, flats or containers may be treated with \*steam\*.)

Q. Why is the state taking regulatory action against structural uses of methyl bromide, and...

**10/3,K/35 (Item 1 from file: 160)**  
 DIALOG(R)File 160:Gale Group PROMT(R)  
 (c) 1999 The Gale Group. All rts. reserv.

01439562  
**East meets west in city-based rattan importer.**  
 TULSA WORLD (OK) May 18, 1986 p. SecG,11

... then carried down the mountains on water buffalo, and deep fried in coconut oil to \*kill\* \*insects\* and other organisms. Water buffalo then carry the wood to the factory, where it is dried in the sun, cut, \*steamed\*, bent and pressed to make tables, loveseats, chaises, bookshelves, etc. A simple chair takes 2...

**10/3,K/36 (Item 1 from file: 248)**  
 DIALOG(R)File 248:PIRA  
 (c) 2001 Pira International. All rts. reserv.

00142210 Pira Acc. Num.: 6810888 Pira Abstract Numbers: 01-86-00911

**Title: USING SODIUM N-METHYLDITHIOCARBAMATE TO EXTERMINATE THE PINE WOOD NEMATODE IN WOOD CHIPS**

Authors: Kin D N; Springer E L

Source: Tappi J vol. 68, no. 12, Dec. 1985, p. 88

ISSN: 0734-1415

Publication Year: 1985

Document Type: Journal Article

Language: English

...Abstract: chips from the USA and Canada had been found to be contaminated with the pinewood \*nematode\*, *Bursaphelenchus Xylophilus* Nickle, and in September 1984, Finland banned imports of chips from the USA

...

... the form of fuel logs, roughwood and pulpwood from North America and Japan. The pinewood \*nematode\* is endemic in North America and native pines are partly resistant to the pine wilt disease which it causes. \*Steaming\* or hot water immersion will \*kill\* \*nematodes\* within wood chips, but has the disadvantage of increasing the chip weight. A study is reported that shows conditions under which pinewood \*nematodes\* may be killed in US southern pine chips, but immersion in a solution of 0...

**10/3,K/37 (Item 1 from file: 635)**

DIALOG(R)File 635:Business Dateline(R)

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0722956 96-81454

**The greening of Valhalla**

Allar, Bruce

Louisville (Louisville, KY, US), V47 N8 p48

PUBL DATE: 960800

WORD COUNT: 3,283

DATELINE: Louisville, KY, US, South Central

TEXT:

...But this is a fragile beauty. Bent grass, particularly this far south, is susceptible to \*insects\* and diseases. It's a heavy-thatch producer, building up a brown, spongy area of dead matte between the green grass and the soil that invites more \*insects\* and disease. And like any northern golfer coming in to play 18 holes in our mid-summer \*steambox\*, it tends to dehydrate in Louisville, a condition that can burn it up, even \*kill\* it.

The biggest threats to bent grass in this region come, coincidentally, during the same...

**10/3,K/38 (Item 2 from file: 635)**

DIALOG(R)File 635:Business Dateline(R)

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0188797 91-10012

**Agritope to Rescue Oregon's Vintners**

Eisler, Gary

Oregon Business (Portland, OR, US), V14 N1 s1 p39

PUBL DATE: 910100

WORD COUNT: 607

DATELINE: Beaverton, OR, US

TEXT:

...the first vines were planted in 1966 -- and because of careful efforts to keep the \*pest\* out. The bug is often carried on farm equipment and the tires of vehicles moving from one \*vineyard\* to another. Oregon's \*vineyards\* are fairly dispersed, making the louse's accidental travel from one \*vineyard\* to another unlikely. Also, growers here frequently \*steam\* clean equipment before they use it in a \*vineyard\*.

In the past, growers tried fumigating the vines or flooding the vineyards, but there is...

**10/3,K/39 (Item 3 from file: 635)**  
 DIALOG(R)File 635:Business Dateline(R)  
 (c) 2001 ProQuest Info&Learning. All rts. reserv.

0024217 87-02900  
**Business Is Mushrooming in the Mushrooming Business**  
 Hamilton, Robert A.  
 The Business Times (East Hartford, CT, US), V8 N6 s1 p1  
 PUBL DATE: 861200  
 WORD COUNT: 2,841  
 DATELINE: Franklin, CT, US

TEXT:

...use anywhere. A layer of salt on the mats in each doorway is used to \*kill\* the chief \*pest\* of mushrooms -- the \*nematode\*, a microscopic worm. Trays and other handling materials are sterilized with 160-degree \*steam\*. Even the spent compost is recycled: Earthgro, a company which is not affiliated with the...

**10/3,K/40 (Item 1 from file: 636)**  
 DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
 (c) 2001 The Gale Group. All rts. reserv.

04143486 Supplier Number: 54354736 (USE FORMAT 7 FOR FULLTEXT)  
**Scientists Looking for Methyl Bromide Alternatives.**  
 Ozone Depletion Network Online Today, pNA  
 April 12, 1999  
 Language: English Record Type: Fulltext  
 Document Type: Newsletter; Trade  
 Word Count: 271

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...soil and structural fumigant, a post-harvest storage treatment and to control a variety of \*pests\*. More than 40 million pounds per year are used by growers in the U.S...

...known as Telone), chloropricrin, metam sodium and methyl iodide. Other nonchemical alternatives include crop rotation, \*steam\*, solarization and organic matter. So far, Telone is one of the most promising chemical options...

...Valley where summer temperatures reach above 100 degrees and can cook the soil enough to \*kill\* pathogens and weeds without affecting crop yields. (AP: 4/9)

**10/3,K/41 (Item 2 from file: 636)**  
 DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2001 The Gale Group. All rts. reserv.

03885626 Supplier Number: 48493675 (USE FORMAT 7 FOR FULLTEXT)

**-ECONOMIC RESEARCH SERVICE: Agricultural outlook -- Part II of IV**

M2 Presswire, pN/A

May 22, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 5786

... on food products as a disinfectant wash or spray. When dispersed into water, ozone can \*kill\* bacteria--like E. coli O157:H7--faster than traditionally used disinfectants, such as chlorine. Ozone also \*kills\* viruses, parasites, and fungi. The U.S. Environmental Protection Agency, in conjunction with the Safe...

...be applied to sanitize food storage rooms and packaging materials, which may help to control \*insects\* during storage of foods and prevent spoilage of produce during shipping. Gaseous ozone is also...

...approved use for meat. Methyl bromide has commonly been used as a fumigant to prevent \*insect\* infestation of commodities such as grapes, raisins, cherries, nuts, and grains, but its use is the appearance, taste, texture, or nutrient content of the food. These methods include \*steam\* pasteurization, used principally in meat processing where beef carcasses are exposed to \*steam\* for short periods of time; flash pasteurization, a heating process to \*kill\* bacteria in juice; and irradiation, which uses low-dose radiation to treat meats, fruits, vegetables...

...a nonthermal method of disinfecting food, ozonation reportedly alters taste little, unlike some heat-based \*steam\* and flash pasteurization systems that cook the product. Further, in some foods, ozone proponents indicate...

...to install an ozone system that is intended to replace a combined chlorine wash and \*steam\* pasteurization process. ... But Adoption May Be Slow Having achieved GRAS status, will ozone be widely...

...given the choice of chlorine, irradiation, or ozone processes (other disinfecting processes such as steam \*pasteurization\* and hot-water rinses were not included in the survey). The disinfecting ability of ozone...

...or proposed to improve food safety. Chlorine is the most commonly used chemical to kill \*pathogens\* on food, but chlorine dioxide, hypochlorite, and trisodium phosphate also have been studied for use...radiation or electron beams, was approved by the Food and Drug Administration in December 1997. \*Steam\* pasteurization, flash pasteurization, and ultraviolet radiation are additional methods that can sanitize food. Each method...

**10/3,K/42 (Item 3 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2001 The Gale Group. All rts. reserv.

03663903 Supplier Number: 47891793 (USE FORMAT 7 FOR FULLTEXT)

**Steam System Can Sterilize Small Soil Plots**

Ozone Depletion Network Online Today, pN/A

August 5, 1997

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 247

We've used this system to \*kill\* molds, fungi, \*nematodes\*, weed seeds, and other soil pathogens that attack cut flowers, bedding plants, potted plants and vegetables," said John Gray, marketing manager of the Beresford, SD- based Sioux \*Steam\* Cleaner Corporation.

"It is also excellent for sterilizing nursery tools, pots, floors and other surfaces...

10/3,K/43 (Item 4 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2001 The Gale Group. All rts. reserv.

01826554 Supplier Number: 43102000 (USE FORMAT 7 FOR FULLTEXT)

**Methyl Bromide Steps Into the Spotlight**

Global Environmental Change Report, v4, n12, pN/A

June 26, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 1454

... or in some cases irradiated instead of fumigated. Biological controls may be used to eliminate \*pests\* in stored grain, or to control \*nematodes\* in soils. Soil solarization (a practice whereby fields are covered in clear plastic, heating the soil enough to \*kill\* \*nematodes\*), \*steam\* sterilization of soils, and less-intensive agricultural practices could also eventually eliminate the need for...  
?

0/7/1 (Item 1 from file: 5)  
 DIALOG(R)File 5:Biosis Previews(R)  
 (c) 2001 BIOSIS. All rts. reserv.

11712376 BIOSIS NO.: 199800494107  
**Steam sterilization of soil for the control of bulb mites.**  
 AUTHOR: Liu T S(a); Huang Y C; Twu J S; Hsieh J H(a)  
 AUTHOR ADDRESS: (a)Dep. Crop Environ., Taichung District Agric. Improvement  
 Stn., Tatsuen, Changhua\*\*Taiwan  
 JOURNAL: Plant Protection Bulletin (Taichung) 40 (3):p241-249 Sept., 1998  
 ISSN: 0577-750X  
 DOCUMENT TYPE: Article  
 RECORD TYPE: Abstract  
 LANGUAGE: Chinese; Non-English  
 SUMMARY LANGUAGE: Chinese; English

**ABSTRACT:** Sterilization of loosened soil with \*steam\* produced by soil sterilizers at 60degree C for 30 min or 80degree C for 20 min resulted in nearly 100% \*killing\* of bulb mites on gladiolus and green onion bulbs placed on the soil surface, 7.5 or 15 cm beneath the soil surface. Three fields under construction where lily had been grown for five consecutive years were chosen to test the mite control efficacy of three treatments, preplanting \*steam\* sterilization at 70degree C for 20 min, gave the best control with an efficacy of 96.1%. While a control of 91.3% was achieved by methyl bromide fumigation, only 66.8% control was obtained with the organophosphorus pesticide terbufos (10% G. at 60 kg/ha). \*Steam\* sterilization was effective against not only bulb mites but also other soil-inhabiting \*insects\* and weeds. However, \*steam\* sterilization using soil sterilizer, bulky and difficult to move around, suffers from low working efficiency Treating one acre of soil would take 11 to 16 hours. If this shortcoming could be overcome and working efficiency increased, \*steam\* sterilization of soil where bulb plants have been grown consecutively might be feasible.

10/7/2 (Item 2 from file: 5)  
 DIALOG(R)File 5:Biosis Previews(R)  
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09811368 BIOSIS NO.: 199598266286  
**Evaluation of a Swedish steam-dryer for treatment of *Bursaphelenchus xylophilus* in pine chips.**  
 AUTHOR: Dwinell L D(a); Magnusson C; Tomminen J  
 AUTHOR ADDRESS: (a)USDA Forest Serv., Southeastern Forest Exp. Stn.,  
 Forestry Sci. Lab., 320 Green St., Athens, GA \*\*USA  
 JOURNAL: Bulletin OEPP 24 (4):p805-811 1994  
 ISSN: 0250-8052  
 DOCUMENT TYPE: Article  
 RECORD TYPE: Abstract  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English; Ukrainian

**ABSTRACT:** A \*steam\*-dryer, designed and manufactured in Sweden, was evaluated for \*destroying\* *Bursaphelenchus xylophilus* in pine chips from southern USA. In a trial, pine chips were treated at different temperature and pressure regimes for 5 or 10 min. The lowest time/temperature/pressure combination was to increase the vessel temperature from 85 to 104 degree C in 5 min at low pressure. Samples of pine chips were assayed for \*nematodes\* in laboratories in USA, Sweden, and Finland. No \*nematodes\* of any species were recovered from any of the treated pine-chip samples. Large and heterogeneous pieces of wood in the treated samples were also \*nematode\*-free. The apparatus was a prototype capable of handling about 400 kg h-1. The final version would have to be able to

process 100-200 t h-1.

**10/7/3 (Item 3 from file: 5)**  
 DIALOG(R)File 5:Biosis Previews(R)  
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08225971 BIOSIS NO.: 000094026935  
**FLORAL VOLATILES OF TANACETUM-VULGARE L. ATTRACTIVE TO LOBESIA-BOTRANA DEN.  
 ET SCHIFF FEMALES**  
 AUTHOR: GABEL B; THIERY D; SUCHY V; MARION-POLL F; HRADSKY P; FARKAS P  
 AUTHOR ADDRESS: LAB. DE NEUROBIOLOGIE COMPAREE DES INVERTEBRES INRA-CNRS UA  
 1190 , B.P. 23, 91440 BURES SUR YVETTE, FRANCE.  
 JOURNAL: J CHEM ECOL 18 (5). 1992. 693-701. 1992  
 FULL JOURNAL NAME: Journal of Chemical Ecology  
 CODEN: JCECD  
 RECORD TYPE: Abstract  
 LANGUAGE: ENGLISH

**ABSTRACT:** The European grapevine moth (EGVM), *Lobesia botrana*, is a major \*pest\* of grapes in Europe. Females are attracted to a nonhost plant:tansy (*Tanacetum vulgare L.*), which is a common weed in Slovakian \*vineyards\*. A \*steam\* distillate extract of tansy flowers was analyzed by means of a GC-EAG technique to screen constituents detected by the olfactory receptors of EGVM females. From more than 200 GC peaks, nine peaks corresponding to monoterpenoids released an EAG response in more than 70% of the females (N = 15); p-cymene, d-limonene, .alpha.-thujene, .alpha.-thujone, .beta.-thujyl alcohol, terpinene-4-ol, (Z)-verbenol, and piperitone. The \*steam\* distillate of tansy as well as synthetic blend of identified compounds released consistent attraction in a field cage. The use of nonhost plants and host plant odors in integrated \*pest\* management is discussed.

**10/7/4 (Item 4 from file: 5)**  
 DIALOG(R)File 5:Biosis Previews(R)  
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02681301 BIOSIS NO.: 000067069371  
**DETERMINING THE CAUSE AND EXTENT OF APPLE CHERRY AND PEAR REPLANT DISEASES  
 UNDER CONTROLLED CONDITIONS**  
 AUTHOR: MAI W F; ABAWI G S  
 AUTHOR ADDRESS: DEP. PLANT PATHOL., CORNELL UNIV., ITHACA, N.Y. 14853, USA.  
 JOURNAL: PHYTOPATHOLOGY 68 (11). 1978 (RECD. 1979). 1540-1544. 1978  
 FULL JOURNAL NAME: Phytopathology  
 CODEN: PHYTA  
 RECORD TYPE: Abstract  
 LANGUAGE: ENGLISH

**ABSTRACT:** A replant disease of \*fruit\* \*trees\* was reproduced under growth chamber conditions. Apple, pear and cherry seedlings, grown in nontreated apple, pear, or cherry orchard soils with histories of replant disease, were stunted and their roots were discolored and reduced in size. Although pretreatment of the soil with dichloropropene-dichloropropane and related C3 hydrocarbons (DD) resulted in an improvement in plant growth and development over the nontreated check, it was inferior to the chloropicrin and \*steam\* treatments. Growth response of apple, pear and cherry seedlings to soil treatments was greatest in the apple replant soil. This soil contained high populations of *Pratylenchus penetrans* and *Paratylenchus projectus*. The apple, pear and cherry orchard soils were, respectively, sandy loam, loam and loamy sand with pH values of 7.2, 5.5 and 5.7. The replant disease of \*fruit\* \*trees\* in New York [USA] is nonspecific; biological agents in addition to plant parasitic \*nematodes\*

(principally P. penetrans) are involved.

**10/7/5 (Item 5 from file: 5)**  
 DIALOG(R)File 5:Biosis Previews(R)  
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02442123 BIOSIS NO.: 000066024667  
**BEHAVIOR OF DDT POLY CHLORINATED BI PHENYLS AND DIELDRIN AT VARIOUS STAGES OF REFINING OF MARINE OILS FOR EDIBLE USES**  
 AUTHOR: ADDISON R F; ZINCK M E; ACKMAN R G; SIPOS J C  
 AUTHOR ADDRESS: FISH. MAR. SERV., MAR. ECOL. LAB., DEP. FISH ENVIRON.,  
 BEDFORD INST. OCEANOGR., P.O. BOX 1006, DARTMOUTH, N.S. B2Y 4A2, CAN.  
 JOURNAL: J AM OIL CHEM SOC 55 (4). 1978 391-394. 1978  
 FULL JOURNAL NAME: Journal of the American Oil Chemists' Society  
 CODEN: JAOC  
 RECORD TYPE: Abstract  
 LANGUAGE: ENGLISH

**ABSTRACT:** Two 300-lb batches of Eastern Canadian herring (*Clupea harengus*) oil were subjected to pilot plant processing to margarine stock for edible use. Samples were taken at various stages during processing for analysis of residues of the \*insecticide\* DDT and its metabolites DDD and DDE, of polychlorinated biphenyls (PCB) and of dieldrin. Residue concentrations in the oil were not affected by degumming (phosphoric acid wash), alkali refining or bleaching with activated earth. DDT and dieldrin were readily and completely \*destroyed\* by commercial hydrogenation over Ni catalyst, and DDD was largely removed at the same time. DDE and PCB were partially reduced during hydrogenation in the one run in which DDD was completely removed, but were unaffected in another run, in which DDD was only partially removed. Deodorization of the oil with \*steam\* and vacuum effectively removed those residues which survived hydrogenation. Analysis of the Ni catalyst before and after hydrogenation showed that removal of residues during hydrogenation was not due to their adsorption to the catalyst, but was more probably due to metal-catalyzed degradation to unidentified products. Deodorizer condensates showed only a slight enrichment in residue levels over those found in the oil.

**10/7/6 (Item 1 from file: 6)**  
 DIALOG(R)File 6:NTIS  
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1758937 NTIS Accession Number: TIB/B93-01732  
**Generation of steam and electricity by using cotton stalk briquettes. A case study in Sudan**  
 (Diss. (Dr.-Ing))  
 Mukhtar Mahgoub, A.  
 Technische Univ. Berlin (Germany, F.R.). Fachbereich 16 - Bergbau und Geowissenschaften.  
 Corp. Source Codes: 030172029; 9201200  
 27 Feb 91 233p  
 Languages: English Document Type: Thesis  
 Journal Announcement: GRAI9323  
 Microfiche only. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.  
 NTIS Prices: MF E07  
 Country of Publication: Germany, Federal Republic of  
 In this work, the technology of wafering and the final evaluation of cotton stems as fuel has been investigated. For this, data has been recorded, measurements on the spot as well as investigations in the

laboratory have been carried out, which allow for a technical-economic evaluation of the application of cotton briquets for \*steam\* generation compared to the application of imported fuels. It has turned out that the cotton stem can be applied briqueted and for \*steam\* generation, by means of which foreign exchanges can be saved for the import of fuels. Through wafering, a highly energetic fuel develops. A further center of the study deals with the advantages and disadvantages as well as with the functional principles of different wafering machines, operating with high temperatures and pressures in order to \*destroy\* \*insects\* existing in the stems. (orig.). (Copyright (c) 1993 by FIZ. Citation no. 93:001732.)

10/7/7 (Item 1 from file: 10)

DIALOG(R)File 10:AGRICOLA

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388574 739155258

*Untersuchungen über die Ursache der Bodenmudigkeit bei Obstgehölzen. IV. Einfluss verschiedener Dampftemperaturen auf freilebende \*Nematoden\* in mudem Boden; Investigations about cause of specific replant disease of \*fruit\* \*trees\*. IV. Influence of different \*steaming\* temperatures on motile forms of menemodes in soil with specific replant disease*

Winkler, H; Otto, G

Zentralb Bakteriol Parasitenk Infektionskr Hyg Abt 2 Naturw 1972 127 (708): 783-788. Ref. Eng. sum.

LC: 448.3 C33 (3)

Language: German

Document Type: ARTICLE

10/7/8 (Item 1 from file: 44)

DIALOG(R)File 44:Aquatic Sci&Fish Abs

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00022917 ASFA Accession Number: IR7816660

*Behavior of DDT, polychlorinated biphenyls (PCBs), and dieldrin at various stages of refining of marine oils for edible use. / [Presented at: American Oil Chemists' Society Meeting; New York (USA); May 1977]*

Addison, R F; Zinck, M E; Ackman, R G; Sipos, J C

Dep. Fish. and the Environ., Fish. and Mar. Serv., Mar. Ecol. Lab., Bedford Inst. Oceanogr., PO Box 1006, Dartmouth, Nova Scotia B2Y 4A2, Canada

"J. Am. Oil Chem. Soc"

55(4), 391-394

CONFERENCE TITLE: Presented at: American Oil Chemists' Society Meeting

CONFERENCE LOCATION: New York (USA) CONFERENCE DATE: May 1977

LANGUAGE: English

SUMMARY LANGUAGE: English

DOCUMENT TYPE: Journal Article; Conference

ASFA INPUT CENTER NUMBER: IR7816660

Two 300-lb batches of Eastern Canadian herring (*Clupea harengus*) oil were subjected to pilot plant processing to margarine stock for edible use.

Samples were taken at various stages during processing for analysis of residues of the \*insecticide\* DDT and its metabolites DDD and DDE, of polychlorinated biphenyls (PCBs) and of dieldrin. Residue concentrations in the oil were not affected by degumming (phosphoric acid wash), alkali refining, or bleaching with activated earth. DDT and dieldrin were readily and completely \*destroyed\* by commercial hydrogenation over Ni catalyst, and DDD was largely removed at the same time. DDE and PCBs were partially reduced during hydrogenation in the one run in which DDD was completely removed, but were unaffected in another run, in which DDD was only partially removed. Deodorization of the oil with \*steam\* and vacuum effectively removed those residues which survived hydrogenation. Analysis

of the Ni catalyst before and after hydrogenation showed that removal of residues during hydrogenation was not due to their adsorption to the catalyst, but was more probably due to metal-catalyzed degradation to unidentified products. Deodorizer condensates showed only a slight enrichment in residue levels over those found in the oil.

**10/7/9 (Item 2 from file: 44)**

DIALOG(R)File 44:Aquatic Sci&Fish Abs  
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00016587 ASFA Accession Number: IR7811745

**Behavior of DDT, polychlorinated biphenyls (PCBs), and dieldrin at various stages of refining of marine oils for edible use**

Addison, R F; Zinck, M E; Ackman, R G; Sipos, J C  
Dep. Fish. Environ., Fish. Mar. Serv., Mar. Ecol. Lab., Bedford Inst.

Oceanogr., PO Box 1006, Dartmouth, Nova Scotia B2Y 4A2, Canada  
"J. Am. Oil Chem. Soc"

55(4), 391-394

LANGUAGE: English

SUMMARY LANGUAGE: English

DOCUMENT TYPE: Journal Article

ASFA INPUT CENTER NUMBER: IR7811745

Two 300-lb batches of Eastern Canadian herring (*Clupea harengus*) oil were subjected to pilot plant processing to margarine stock for edible use. Samples were taken at various stages during processing for analysis of residues of the \*insecticide\* DDT and its metabolites DDD and DDE, of polychlorinated biphenyls (PCBs) and of dieldrin. Residue concentrations in the oil were not affected by degumming (phosphoric acid wash), alkali refining, or bleaching with activated earth. DDT and dieldrin were readily and completely \*destroyed\* by commercial hydrogenation over Ni catalyst, and DDD was largely removed at the same time. DDE and PCBs were partially reduced during hydrogenation in the one run in which DDD was completely removed, but were unaffected in another run, in which DDD was only partially removed. Deodorization of the oil with \*steam\* and vacuum effectively removed those residues which survived hydrogenation. Analysis of the Ni catalyst before and after hydrogenation showed that removal of residues during hydrogenation was not due to their adsorption to the catalyst, but was more probably due to metal-catalyzed degradation to unidentified products. Deodorizer condensates showed only a slight enrichment in residue levels over those found in the oil.

**10/7/10 (Item 1 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03601778 CAB Accession Number: 982303076

**Environmental hazards of fumigants: the need for safer alternatives.**

Wheeler, W. B.; Kawar, N. S.

IFAS, Food & Environmental Toxicology Laboratory, University of Florida, FL, USA.

Conference Title: Pesticides and the environment. Proceedings of the Sixth Arab Congress of Plant Protection, Beirut, Lebanon, 27-31 October 1997.

Arab Journal of Plant Protection vol. 15 (2): p.154-162

Publication Year: 1997

ISSN: 0255-983X --

Language: English Summary Language: arabic

Document Type: Conference paper; Journal article

Fumigants have been used effectively in agriculture and related areas for many years. A major use is when soil-applied to reduce or eliminate soil borne diseases, \*insects\*, and weeds, which if not controlled would

adversely affect the growth and production of agricultural crops. Fumigants have great advantages in that they effectively penetrate the materials being treated, are efficient in \*killing\* \*pests\* and usually dissipate leaving no hazardous residues. However, fumigants are toxic to humans and animals and are potentially hazardous during application and dissipation. Fumigants, of which methyl bromide is a prominent example, are usually allowed to evaporate into the atmosphere when used in soil or in fumigation chambers. Fumigants used in soil have been detected in groundwater and certainly have the potential to enter drinking water and result in human exposure. A major concern today is the environmental impact of methyl bromide owing to its potential movement into the stratosphere and its contribution to the depletion of the stratospheric ozone layer. The search for safer alternatives to methyl bromide has been ongoing for several years. Potential replacements include the use of less hazardous chemicals, non-chemical soil disinfection using \*steam\* or soil solarization, and applying other practices, such as biological control and crop rotation, to reduce \*pest\* infestation. 36 ref.

**10/7/11 (Item 2 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03553248 CAB Accession Number: 982401409

**Investigations of phase soil cooling.**

Original Title: Dirvos ausimo fazes tyrimai.  
Sirvydas, P. A.; Stepanas, A.  
Lithuanian University of Agriculture, Raudovaris, 4320 Kauno r., Lithuania.

Zemes Ukie Inzinerija, Mokslo Darbai vol. 29 (2): p.33-42

Publication Year: 1997 --

Language: Lithuanian Summary Language: english; russian

Document Type: Journal article

The majority of plant diseases and \*pests\* are \*destroyed\* at temperatures of 82 deg C. During soil sterilization, soil reaches a temperature of 100 deg C. Due to accumulated heat in the soil, the process of soil sterilization continues for some time. Theoretical investigations showed that heated soil temperature falls very slowly. Experimental investigations of phase soil cooling showed that an hour after the \*steam\* is turned off, the temperature of the soil is 97-80 deg C, meaning that effective sterilization continues for an hour. However, there is intensive cooling on the surface of the soil. Covering the surface of the soil during the heating and cooling processes leads to improved sterilization. 4 ref.

**10/7/12 (Item 3 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03255710 CAB Accession Number: 961608066

**Return to resistance: breeding crops to reduce pesticide dependence.**

Robinson, R. A.

xv + 480 pp.

Publication Year: 1996

Publisher: agAccess -- Davis, California, USA

ISBN: 0-932857-17-5

Price: \$29.95

Language: English

Document Type: Book

Written mainly for those concerned about the world food supply and the pollution of the environment by excessive use of chemical pesticides but who lack detailed scientific knowledge about these subjects, this book

examines how the problem of crop parasites, which currently \*destroy\* about one-fifth of all crop production worldwide, can be largely overcome by breeding crops for horizontal resistance. Breeding for horizontal resistance, which is the resistance controlled by a polygenic system, has been largely ignored due to the apparent success of the gene-for-gene system of vertical resistance. The author examines the pitfalls of this classical and Mendelian approach to breeding crops and advocates horizontal resistance as a means of providing a largely \*pest\*-free and pesticide-free agriculture. The book is organized into 3 sections, the first of which deals with explanations (of aspects such as genetics, plant breeding, resistance, pathosystems, the disadvantages of pesticides, and cultivar cartels). The second section gives examples of crops which have been successfully bred to overcome \*pests\* and diseases (including potato, maize, coffee and sugarcane), gives examples of crops which have been maintained over time because they were selected in the past for horizontal resistance, and examines why the Green Revolution ran out of \*steam\*. The third section advocates the formation of plant breeding clubs to undertake horizontal resistance breeding in order to bring the subject to greater general public awareness and to challenge the vested interests of those breeding for vertical resistance. This section offers advice on techniques, screening existing populations, and crops best avoided. The book also has a glossary of terms, appendices, including one on CAB International's parasite identification services, and a subject index. 8 ref.

10/7/13 (Item 4 from file: 50)

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

02957943 CAB Accession Number: 952300033

**Diagnosis of apple replant problems in New York orchard soils and evaluation of nematode-suppressive cover crops.**

Pruyne, P. T.; Merwin, I. A.; Mullin, P. G.; Gibson, D. M.

Department of Fruit and Vegetable Science, Cornell University, Ithaca, NY, USA.

Acta Horticulturae (No.363): p.121-128

Publication Year: 1994

ISSN: 0567-7572 --

Language: English

Document Type: Conference paper; Journal article

Nearly half of the \*tree\*-\*fruit\* growers surveyed in New York, USA, reported serious problems in replanting their orchards. Past research has established that one of the more effective preventive treatments for orchard replant disorders (ORD) has been soil fumigation with broad-spectrum biocides or nematicides. It is suggested that increasing restrictions on the use of many soil fumigants necessitates the development of alternative treatment strategies for ORD. Several cover crops or cultural practices were evaluated for controlling \*fruit\*-\*tree\* root pathogens associated with ORD and the mechanisms of \*nematode\* suppression by certain plants were investigated. Soils were sampled from orchards in the major fruit-growing regions of New York, identifying and quantifying plant parasitic \*nematodes\* at each site. ORD was then assessed using a diagnostic bioassay comparing dry weights of apple seedlings grown for 10 weeks in \*steam\*-pasteurized (PS) compared with untreated field soil (FS). Seedling dry weight ratios (PS:FS) ranged from 1.1 to 7.6. Severe stunting (PS:FS >2.0) of apple seedlings occurred in half of the non-treated soils, in association with substantial populations of *Pratylenchus penetrans* and/or *Xiphinema* spp. \*nematodes\*. Five ORD soils were selected for further evaluation of the effects of *Tagetes patula* cv. Sparky, *Brassica campestris* cv. Humus, endophyte infested (*Acremonium* spp.) *Lolium perenne* cv. Repel II, *Sorghum sudanense* or *Trifolium repens* cv. Sonja cover crops, and ClandoSan (a chitin-protein

plus urea formulation) soil amendment, upon the subsequent growth of apple seedlings in each soil. Leachate from soil/cover crop combinations was also analysed for toxicity to *P. penetrans* cultures at crop maturity, and following soil incorporation and breakdown of each cover crop. Preliminary studies with aqueous leachates showed no significant differences in \*nematode\* mortality in cover crop leachates compared with water controls. This paper was presented at the Third International Symposium on Replant Problems held in Penticton, British Columbia, Canada, on 20-23 July 1993. 15 ref.

10/7/14 (Item 5 from file: 50)

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

02481015 CAB Accession Number: 910655701

**Subsistence agriculture improvement: manual for the humid tropics.**

Haupstr. 9, W-7401 Nehren, Germany.

(Ed. 2): xiv + 231 pp.

Publication Year: 1990

Wau Ecology Institute Handbook No. 10; copublished with Margraf Scientific Publishers, W-6992 Weikersheim, Germany, as Tropical Agroecology No. 4

Editors: Goeltenboth, F.; Dalpadado, V. E.; Howcroft, N. H. S.; Louman, B.; Samana, F.; Siki, B.; Nalu, G.

Publisher: Wau Ecology Institute -- Wau, Papua New, Guinea

ISBN: 9980-73-001-3 (Papua New Guinea); 3-8236-1157-7 (Germany)

Language: English

Document Type: Book

The second, revised, edition of a book first published by the Wau Ecology Institute (a non-profit NGO for the study of and education in ecology and conservation, rural development and environmental protection in Papua New Guinea) in 1985, as a result of its Subsistence Agriculture Project. This project aimed to develop appropriate techniques for training people involved in an improved subsistence agriculture programme (as a replacement for shifting cultivation) by showing how to grow more and better food in a site-stable garden. There are 5 main sections to the manual, and different sections/subsections are by different authors. The first 2 sections, 'Introduction' and 'Notes on subsistence agriculture and the subsistence agriculture improvement project', give a brief account of traditional methods used in Papua New Guinea. The third section describes the mid-mountain biogeography of Papua New Guinea. The last 2 sections form the main part of the book. Section 4, 'Appropriate tools for the subsistence garden', describes the construction and use of the tools and necessary basic equipment for the subsistence garden, and the practices, systems and plants used. All tools and equipment are made from local material and, as far as possible, the local practices and skills of the villagers and trainees were integrated into the programme. The main subsections in section 4 are: the construction of compost stockades; construction of a nursery; preparation of compost bricks; production/construction of banana-fibre-pots, a soil-\*steamer\*-drum, an appropriate water-can-baffle, a bamboo-marker, an A-frame and a simple solar drier; seed selection and storage; terrace and contour-ridge construction; the tree planting system in the garden area (natural regeneration, improvement of fallow vegetation, scattered planting of mixed species, contour planting, orientation, underplanting, interplanting, forest tree and tree crop plantations); compost production and use; planting and protection of seedlings; and plants for the mid-mountain subsistence garden (summary tables showing the altitudinal limits of crops, and data on the food value, ecology, cultivation, and \*pests\* and diseases of 31 food crops, including vegetables, root crops, \*fruit\* \*trees\* and spices). The last section, 'Information on subsistence agriculture improvement', discusses: subsistence agriculture and soil

improvement (shifting cultivation and alternatives to it, and biological and physical soil conservation measures, including cropping practices); agroforestry techniques; nitrogen fixing trees (with accounts of the main genera used - Casuarina, Albizia, Leucaena, Acacia and Calliandra); simple organic plant protection from \*pests\* and diseases (prevention, using agronomic techniques and resistant plants, and control, using biological and physical methods and biological pesticides and repellents); women in agriculture; the application of work study techniques; extension methods; nutrition improvement; ecological and conservation aspects; and educational aspects. A list of useful addresses (in Papua New Guinea) and an index are included. 26 ref.

**10/7/15 (Item 6 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

02170844 CAB Accession Number: 891122223

**Crickets in the greenhouse.**

Shikov, E. V.

Zashchita Rastenii (Moskva) (No. 3): p.54-55

Publication Year: 1987 --

Language: Russian

Document Type: Journal article

Considerable damage to vegetables in greenhouses in the USSR is caused by Acheta domesticus. The heat-loving, nocturnal species, evidently arriving in greenhouses in containers from storage places, feeds and reproduces there throughout the year, remaining concealed during the day and concentrating round heating systems. A female lays up to 170 eggs, and various stages are present simultaneously. In the summer the \*pest\* transfers freely to and from the land outside, especially if it is weedy. Control is aimed at preventing entry of the \*pest\*. All containers are disinfected with a 2% formalin solution or fumigated with a mixture of formalin and potassium permanganate. Soil is \*steamed\* to \*destroy\* the eggs. At the end of cultivation, premises are carefully treated with a 50% Actellic (pirimiphos-methyl) or 50% carbophos (malathion) e.c., each at 0.2%, applied at 3-6 and 2.4-3.6 kg/ha, respectively.

**10/7/16 (Item 7 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01871581 CAB Accession Number: 870617001

**Heat-treating wood chips: a possible solution to pine wood nematode contamination.**

Kinn, D. N.

SFES, USDA For. Serv., 2500 Shreveport Highway, Pineville, LA 71360, USA.

Tappi Journal vol. 69 (1): p.97-98

Publication Year: 1986

ISSN: 0734-1415 --

Language: English

Document Type: Journal article

A study was undertaken to examine ways of reducing the spread of pine wilt disease from USA to countries importing US wood. Four 5-gallon samples of wood chips were taken from various locations in a chip pile in Alabama. All 4 samples were found to contain \*nematodes\*; at least 2 contained the pine wood \*nematode\* *Bursaphelenchus xylophilus* which is responsible for pine wilt disease. Other \*nematodes\* were *Cephaloboides* sp., *Mononchoides* sp., *Rhabdodontolaimus* sp. and species in the family *Rhabditidae*. Samples of chips were then exposed to dry heat or \*steam\* or immersed in water at temp. ranging from 40 to 135 deg C for different

lengths of time. Dry heat at temp. from 120 to 135 deg C had to be applied for 8-10 min in order to \*kill\* the \*nematodes\*; these temperatures are considered too high to be practical and probably have a deleterious effect on chip quality. \*Steam\* heat was successful at lower temp. and for shorter periods (2 min at 85 deg C, 8 min at 65 deg C). Immersion required even lower temp. (2 min at 55 deg C, 6 min at 50 deg C). 11 ref.

**10/7/17 (Item 8 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01840945 CAB Accession Number: 870840872

**Survival of *Bursaphelenchus xylophilus* in wood chips.**

Kinn, D. N.  
Southern Forest Exper. Sta., USDA Forest Serv., 2500 Shreveport Highway,  
Pineville, LA 71360, USA.  
Bulletin OEPP vol. 16 (3): p.461-464  
Publication Year: 1986  
ISSN: 0250-8052 --  
Language: English Summary Language: french; russian  
Document Type: Journal article  
Treatments to \*kill\* *B. xylophilus* in infested logs or other material to be exported to areas free of the pinewood \*nematode\* are described. These include dry heat at temperatures of 120-135 deg C for 8-10 min, \*steam\* heat for 2 min at 85 and 90 deg C, 4 min at 80 deg C, 6 min at 70 and 75 deg C or 8 min at 65 deg C, hot water treatment for 2 min at 70, 65, 60 or 55 deg C or 6 min at 50 deg C, or immersion in dithiocarbamate solution.  
9 ref.

**10/7/18 (Item 9 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01603893 CAB Accession Number: 850329706

**(Soil) steaming with year-round chrysanthemums. Influence on growth and yield is slight.**

Original Title: Stomen bij jaarrondteelt chrysant. Invloed op groei en produktie gering.

Runia, W. T.; Hoeven, A. P. van der  
Proefstation voor de Tuinbouw onder Glas, Naaldwijk, Netherlands.  
Vakblad voor de Bloemisterij vol. 39 (34): p.34...37  
Publication Year: 1984  
ISSN: 0042-2223  
3 pl. --

Language: Dutch  
Document Type: Journal article  
\*Steaming\* is now the usual method of soil disinfection for Dutch glasshouse growers, following a ban on the use of methyl bromide. Data are presented from trials on 4 commercial holdings, investigating the effects of \*steaming\* for 1 or 6 h in uncultivated soil or for 6 h in cultivated soil. Two of the 4 soils were heavy loams, and one was a light loam and one a clay. With \*steaming\* for 1 h the soil temperature below 10 cm was not raised enough to \*kill\* the soil fungi, but with 6 h of \*steaming\* the soil was effectively disinfected to a depth of 20 cm. The soil Mn content was also raised by \*steaming\* for 6 h, more so in the heavier soils and particularly in cultivated soil. Soil treatments had no significant effects on growth, cropping or flower vase life; untreated plots of the 4 soils were not significantly infested with \*nematodes\* or fungi so \*pest\* and disease control could not be assessed in this study.

10/7/19 (Item 10 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

01003316 CAB Accession Number: 810580731

**Blumea species (Compositae): insecticides from plants.**

Dongre, T. K.; Rahalkar, G. W.

Biology and Agriculture Division, Bhabha Atomic Research Centre, Trombay, Bombay-40084, Maharashtra, India.

Journal of Communicable Diseases vol. 12 (1): p.39-41

Publication Year: 1980

ISSN: 0019-5138 --

Language: English

Document Type: Journal article

Since an aqueous extract of the leaves of *Blumea balsamifera* is known to be toxic to cockroaches, and aqueous, kerosene and acetone extracts of *B. densiflora* have been tested (although unsuccessfully) against Diptera, the \*insecticidal\* activity of 3 further *Blumea* species common in the Trombay area of Bombay, India, was tested in the laboratory against third-instar larvae of *Culex quinquefasciatus* Say (*pipiens fatigans* Wied.). An oily residue separated from the \*steam\*-distillate of the leaves of *B. eriantha* gave complete \*kill\* after 24 h at 200 p.p.m., a similar residue from *B. oxydonata* gave 78.7% mortality and one from *B. malcomii* gave no larval mortality within the 24 h but apparently caused the death of some larvae after 5 days; at 50 p.p.m., only the oil from *B. eriantha* gave any control in 24 h (42.7%). Further experiments with the oil of *B. eriantha* showed that even 1 p.p.m. gave some mortality (25.5%, as compared with 4% for no treatment); that Fraction 1 of *B. eriantha* oil was more toxic to the larvae than the other 4 fractions; and that although the oil contained 95% ketones, of which the main constituent was d-carvotanacetone, this ketone was not the primary toxic principal of the oil since it was also found in the comparatively ineffective oil of *B. malcomii*. 4 ref.

10/7/20 (Item 11 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00758795 CAB Accession Number: 790854912

**Physical methods of control.**

Southey, J. F.

Plant Path. Lab., Harpenden, Herts, UK.

Plant nematology

p.303-313

Publication Year: 1978

MAFF/ADAS GD1

Editors: J.F. Southey

Publisher: HM Stationery Office. -- London, UK

Language: English

Document Type: Miscellaneous

Heat treatment of soil for \*nematode\* control in protected cultivation includes partial sterilization by \*steam\*, electrical heating, short-wave diathermy and pre-heating and 'cooking-out' of mushroom composts. Hot water treatment, used for \*killing\* \*nematodes\* in infested plant material, usually bulbs, is discussed in detail and hot-air, electrical, radiation, ultrasonic and washing treatments are briefly described.

10/7/21 (Item 12 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00279513 CAB Accession Number: 750822993

**Studies on the nematodes causing crop losses of cultivated mushroom, *Agaricus bisporus* (Lange) Sing.**  
 Han, Y. S.; Park, J. S.; Kim, D. S.; Shin, K. C.  
 Institute of Agricultural Science, Suweon, S.Korea.  
 Research Reports of the Office of Rural Development, Soil Science,  
 Fertilizer, Plant Protection and Micrology vol. 16 p.35-44

Publication Year: 1974 --

Language: English Summary Language: korean

Document Type: Journal article

Extraction and identification of \*nematodes\* from samples of compost and casing material from 35 mushroom farms in South Korea revealed the presence of *Rhabditis* sp. (in all samples), *Aphelenchoides* sp. (in 31.4%), *Ditylenchus* sp. and *Aphelenchus* sp. (each in 2.9% of compost samples only). Mycelial damage in mushroom compost experimentally infested with *Aphelenchoides* increased with the temperature and moisture content. No signs of damage were evident at 10 deg C; at 25 deg C complete destruction occurred in 7 days. In compost inoculated with *Rhabditis* mycelial destruction was complete in about 7 weeks and the numbers of *Rhabditis* increased to high levels. The effects on the mycelia were considered to be due to accumulation of \*nematode\* excretory products, not to \*nematode\*-induced pH changes. Both *Aphelenchoides* and *Rhabditis* significantly reduced the numbers of fruiting bodies produced. The main sources of the \*nematode\* infestation were found to be the compost and casing materials. Experiments on the thermal death point of *Rhabditis* indicate that \*steam\* sterilization of soil for 30 min. and holding compost at 70 deg C for 6 hours would be satisfactory control measures. ADDITIONAL ABSTRACT: A survey of 35 mushroom farms showed *Aphelenchoides* sp. and *Rhabditis* sp. to be the commonest \*nematodes\*. Both \*destroyed\* the mushroom mycelium and significantly reduced yields. The main sources of infestation were compost and casing materials. Holding compost at 60 deg C for 3 h controlled *Rhabditis* sp.

10/7/22 (Item 13 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00245705 CAB Accession Number: 740518464  
**A method to rear *Stomoxys nigra* Macquart (Diptera, Muscidae) in the laboratory.**

Ramsamy, M.

Ministry of Agriculture and Natural Resources, Mauritius.

Revue Agricole et Sucriere de l'Ile Maurice vol. 51 (4): p.236-241

Publication Year: 1972

ISSN: 0370-3576 --

Language: English Summary Language: french

Document Type: Journal article

Techniques for rearing *Stomoxys nigra* Macq. in the laboratory (cf. RAE/B 61, 2186) were studied with a view to attempting to control the fly in Mauritius by the release of sterile males. One of the main difficulties had been the provision of a suitable medium. As the pupae were first found in Mauritius in decaying grass and sugar-cane leaves, the use of raw vegetable materials was investigated, and the grass *Stenotaphrum dimidiatum* shredded and mixed with one part milk to 20 parts grass was found to give excellent results. When it was treated with \*steam\* or 0.2% formalin to \*kill\* entomophagous \*nematodes\* of the genus *Rhabditis*, over 60% of larvae reared in it gave rise to adults, which, if fed on defibrinated blood lived up to 55 days at 28-30 deg C and 80-90% R.H. Pupae were collected by flotation and kept at 30 deg C and 100% R.H. on wet foam in constant light from an 80-W fluorescent tube 30 cm above. Citrated bovine blood on foam was provided daily for half an hour as food for the adults. This restriction of the opportunity to feed eliminated slow feeders and selected flies able to resist starvation. It was also

cleaner and prevented oviposition on the foam. A piece of wet khaki cloth placed below the gauze cage and left day and night proved the best of three oviposition media tested and gave 88% hatch of eggs. A colony has been maintained to the ninth generation by the method described. 12 ref.

**10/7/23 (Item 14 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

00133293 CAB Accession Number: 740320906

**Steam sterilization of tomato greenhouse soils.**

Farley, J. D.; Oakes, G.; Jaberg, C.  
Research Summary, Ohio Agricultural Research and Development Center  
vol. 43 (No. 73): p.21-24

Publication Year: 1974 --

Language: English

Document Type: Journal article

Soil temperatures during and after winter and summer \*steaming\* were recorded in 9 commercial glasshouses. The critical temperature (140 deg F) to ensure the destruction of \*insect\* \*pests\*, weeds and disease pathogens (apart from TMV) was reached after only 3 h in summer \*steaming\* and after 5 h in winter. During the summer, temperatures of 200 deg or above were reached after 3.5 h and this would be sufficient to \*destroy\* TMV. If TMV-resistant tomato cvs are grown considerable savings in fuel costs can be effected by reducing the \*steaming\* time and covering the treated soil with a tarpaulin to retain the heat. 1 ref.

**10/7/24 (Item 15 from file: 50)**

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

00068967 CAB Accession Number: 730807803

**Experiments with fungicides and insecticides in fruit and gardening crops in 1971.**

Original Title: Forsoeg med plantebeskyttelsesmidler i frugtavl og gartneri 1971.

Hansen, T.; Rasmussen, A. N.; Schadegg, E.

State Plant Pathology Inst., Lyngby, Denmark.

Tidsskrift for Planteavl vol. 76 (5): p.682-706

Publication Year: 1972

ISSN: 0040-7135

Plant nematology pp. 697-702 --

Language: Danish Summary Language: english

Document Type: Journal article

Of various chemicals tested against Aphelenchoides fragariae in begonia only methomyl was about as effective as different parathion formulations and mevinphos. Bromophos was also effective but was slightly phytotoxic. Experiments were performed with carbofuran against Heterodera rostochiensis in potatoes, and several other chemicals against Meloidogyne spp. on Ficus benjamina. Meloidogyne on cucumbers and tomatoes seemed to be slightly better controlled by \*steaming\* the soil than by treatment with methyl bromide. 'dagger'. ADDITIONAL ABSTRACT: Details are given of tests carried out at the State Plant Pathology Institute, Denmark, in 1971 with fungicides and \*insecticides\* (see preceding abstract) against \*pests\* of fruit and garden crops, including some against Aphis pomi Deg. on apple, Hoplocampa minuta (Chiest) (fulvicornis F.) on plum, Anthonomus rubi (Hbst.) on Cecidophyopsis (Eriophyes) ribis (Westw.) on black currant, Panonychus (Metatetranychus) ulmi (Koch) on \*fruit\* \*trees\* and Tetranychus urticae Koch on glasshouse crops.

10/7/25 (Item 16 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00031139 CAB Accession Number: 730306726

**Studies on the cause of specific replant disease of \*fruit\* \*trees\*. IV.  
The effect of different \*steaming\* temperatures on free-living \*nematodes\*  
in sick soil.**

Original Title: Untersuchungen über die Ursache der Bodenmudigkeit bei Obstgehölzen. IV. Einfluss verschiedener Dampftemperaturen auf freilebende Nematoden in mudem Boden.

Winkler, H.; Otto, G.

Institut für Obstforschung, Dresden-Pillnitz, German Democratic Republic.

Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene vol. 127 (7/8): p.783-788

Publication Year: 1972 --

Language: German Summary Language: english

Document Type: Journal article

Although soil steaming at 60 deg C and over is required to remove growth inhibition in apple trees (see previous abstract), motile forms of soil nematodes were almost completely inactivated if the soil was steamed at 45 or 50 deg for 45-60 min. It was therefore concluded that nematodes are not a causal factor in specific replant disease of apples. ADDITIONAL

ABSTRACT: Comparison of the temperatures needed to inactivate motile soil nematodes (45 to 50 deg C for 45 to 60 min.) and to prevent the inhibition of growth in apple trees caused by specific replant disease (60 deg C+) indicates that nematodes are not the main factor responsible for this disease. (From English summary). 16 ref.

10/7/26 (Item 17 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00025206 CAB Accession Number: 720301800

**The great wine blight.**

Ordish, G.

237 pp.

Publication Year: 1972

8 pl., 11 fig., 1 map

Publisher: -- London, U.K., J.M. Dent & Sons Ltd.,

ISBN: 0460039482

Price: pounds-sterling 2.75

Language: English

Document Type: Book

In the Times of 17 July, 1972 it was noted that the inhabitants of the UK now drink twice as much wine as before the last war. That mercifully is quite a tidy drop, but it would have been a very tiny drop on both occasions, had no remedy been devised for the devastation of vinifera \*vineyards\* by Phylloxera vastatrix. George Ordish tells us all about it from A to Z, starting with the first identification on a European vine of this revolting \*insect\* in a greenhouse at Hammersmith in 1863, it having, thanks to \*steam\* navigation, successfully crossed the Atlantic alive. Next we hear of its devastating effect on the Bouches du Rhone, as noted by M. Delorme in 1867, then its rapid spread, the steps taken against it, in fact its history to the end. It is indeed a horrible \*insect\* and, at least to one who is not an entomologist, it is not a subject to tickle the fancy. Nevertheless, since the author has a quite extraordinary flair for making dull subjects sparkle, not only will the studious winegrower be more than pleased to read this book and realize that the experts can actually, after many a setback, sometimes deliver the goods, but the wine-bibber, or perhaps I should say the oenophilist, will doubtless find

it an inspiring accompaniment to his wine and, may be, laugh inordinately at the human quirks and frailties displayed on the slow road to final triumph. For in this erudite, informative and highly diverting tale, in the compilation of which he must have dug deep into hundreds of notes, letters, books, treatises and what have yous, the author describes in detail the incredibly crooked progress which eventually, for practical purposes, led to a solution of the problem. Half the fun lies in the boss shots made in curative attempts. Thus in 1879 the Commission Superieure du Phylloxera, originally set up to adjudicate on the reward of 320 000 francs offered by the Ministry of Agriculture for a cure, dolefully reported that the "names of the inventors (of cures) change every year, but the remedies suggested are of the same kind. As usual a few facetious suggestions slip in among a number of eccentric proposals put forward in good faith." Even correspondents to the Times pontificated, eccentrically rather than facetiously, it is to be hoped. But at least the suggestions did show some diversity. Thus they included: wrapping the roots with green tobacco plants, with ice, and with snow - treating with asafoetida, with Signor Bourbon's fire bellows - restricting grape yield so as not to overstrain the plants - grafting on blackberries, mulberries, and gooseberries - the use of oil, sulphur, sea water, tobacco, tar, phenol, coffee grounds, and incense - intercropping, and literally hundreds of other devices. The only remedy which did show a certain measure of success was the unpleasant and highly dangerous carbon bisulphide. This \*insecticide\* was, however, evanescent. It killed the \*insect\* and was gone and the vine was back at square one ready for fresh infection. Eventually the conquest of phylloxera was, as the author puts it, "a technical triumph for a devoted band of intelligent men and women of many nationalities who overcame it by the exercise of stubbornness, empiricism, resilience, endless patience, hard work, the occasional flash of genius and blinding glimpse of the obvious". The expedient of grafting on certain of the American vines - almost you might say a hair of the dog that bit you - was the final solution. To revert momentarily to that 320 000 franc prize, it was never awarded. In the author's opinion it should have gone to M. Bazille or M. Laliman or have been shared between them, since they both suggested combining the qualities of the American and European plants by grafting. M. Laliman applied for it but was refused on the specious, even though strictly accurate, ground that he had not cured, only prevented, phylloxera, and after his death the reluctance of the government department to part with money was again in evidence when Laliman files applied and was refused. Anyhow it is a good, rollicking tale, a serious but comic history magnificently told. Buy it. D. Akenhead.  
190 ref.

10/7/27 (Item 1 from file: 76)  
 DIALOG(R)File 76:Life Sciences Collection  
 (c) 2001 Cambridge Sci Abs. All rts. reserv.

01445190 2435002

**Continuous process for the partial sterilization of mushroom casing.**

Diprose, M.F.; Evans, G.H.

Minister Agric., Fisheries and Food, London (UK)

PATENT NUMBER: US Patent 4,978,501

PATENT CLASSIFICATION: US Cl. 422/22 Int. Cl. A61L 2/08; B01J 19/02 (1990.)

DOCUMENT TYPE: Patent LANGUAGE: ENGLISH

SUBFILE: Microbiology Abstracts Section A: Industrial and Applied Microbiology

Wet horticultural material is exposed to radio frequency waves to heat said material to a predetermined temperature of 90-100 degrees C., and thereafter to the heat generated by said waves for a period of time in the range of about 30 seconds to about 20 minutes sufficient to \*destroy\* fungi

pattern might have become established during this long, dormant period. (Only a series of core samples can establish whether this is a plausible scenario.) In recent centuries, however, the high level of volcanic activity seems to have made the migrations somewhat dysfunctional. Future generations of iguanas may eventually be forced to abandon the caldera in favor of less precarious nesting sites. No one knows, however, how long it might take for such behavior to change.

The most recent eruption of Fernandina was in September 1988. Without warning, a blanket of scorching cinder and rocks covered a large area on the rim of the volcano, stripping foliage and bark off trees and baking many iguanas to death. At the same time, a huge segment of the rim collapsed, followed by a lava flow that disfigured the caldera beyond recognition. The lake was completely buried and the entire floor covered by an enormous layer of rubble, just a few weeks before the main iguana hatching period. When I joined a geology team a year later, nothing on the caldera floor bore the slightest resemblance to what I had seen in the past. The only reminder of former days came at the lowest point of the caldera floor where one of two tiny ponds flourishing with algae held one lone pintail.

Yet as I walked this eerie, pock-marked landscape plastered with baked lake sediment, signs of iguanas were everywhere, and the latest wave of hatchlings was already emerging. This delicate interplay between island life and volcanic forces brought to mind the other great Fernandina mystery: a race of large saddleback tortoises that is known from only a single specimen collected on the island in 1906. Apparently, this species became extinct less than a century ago entirely because of natural conditions on Fernandina. So far the indomitable land iguana has escaped such a fate.

#### Added material

Text and photographs by Tui De Roy

A female land iguana looks over Fernandina Island's volcanic rim.

A major 1978 eruption created billows of steam, right, as lava flowed into Fernandina's lake, extinguishing all aquatic life. Below: A volcanic vent spews molten rock inside the caldera, altering its landscape.

Near sparse clumps of grass on the caldera floor, below, two female land iguanas battle over a nesting site.

After they bury their eggs, left, females guard them for several days, then climb out of the volcano. Several females, below, nest in a natural lava cave. On the caldera floor, bottom, another female buries her clutch of eggs.

In 1974, Fernandina's mineral lake, rich in algae and small organisms, supported a flock of white-cheeked pintail ducks, left. Four years later, after a major eruption, the lake was completely boiled away, leaving a deposit of dried sediment, below.

A Galapagos hawk, below, preys on an iguana on Santa Fe Island, east of Fernandina. Within the caldera, hawks prey mainly on hatchling lizards, not on adults. Right: Hot volcanic ash rained down on Fernandina's eastern rim in 1988, killing lush vegetation and burying many lizards alive. An iguana succumbed while trying to dig herself out.

During a rare social gathering, Fernandina's land iguanas bask together in the afternoon sun.

10/7/29 (Item 1 from file: 117)

DIALOG(R)File 117:Water Resour.Abs.

(c) 2001 Cambridge Scientific Abs. All rts. reserv.

00722747 WRA NUMBER: 9009470

**Insecticides for Insect Pest Control in Constructed Wetlands for  
Wastewater Treatment: A Dilemma**

Snoddy, E L ; Cooney, J C

Tennessee Valley Authority Muscle Shoals, AL. Vector and Plant Management Program

serangga Helopeltis pada perlakuan minyak mimba dan ekstrak biji srikaya juga secara nyata lebih rendah dibanding kontrol.

**10/7/31 (Item 2 from file: 203)**

DIALOG(R)File 203:AGRIS

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01874865 AGRIS No: 95-072413

**Installation for processing foods in a sterilized condition**

Inagaki, J. (Hazugun, Aichi (Japan))

Publisher: BPTTI , Makati, Metro Manila (Philippines), 2 Mar 1994, 18 leaves Patent No: PH 28103 C Patent No: Philippine patent document no. 28103/c/ Patent Classification: A23B 7/10

Notes: 3 ill.

Language: English Summary Language: English

Place of Publication: Philippines

Document Type: Patent, Summary

Journal Announcement: 2106 Record input by Philippines

Abstract in English

A sterilizing method for treatment of fresh fruits and an apparatus used for the method that allow a significant reduction of \*steam\* consumption and of fruit sterilization cost is disclosed. The present invention is characterized by that \*extermination\* of \*vermin\* eggs and sterilization and disinfection of fresh fruits is conducted without deteriorating the freshness of the fruits to be treated by irradiating for infrared rays on the fruits to preheat the cores of the fruits to a predetermined temperature and then by maintaining the fruit cores at a predetermined temperature for a predetermined period of time in saturated \*steam\*.

**10/7/32 (Item 3 from file: 203)**

DIALOG(R)File 203:AGRIS

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01579809 AGRIS No: 92-024486

**Insect killing system**

Imagama, M.

Sanayu Sangyo Kabushiki Kaisha, Kagashima-ken (Japan)

Publisher: Philippine Patents Office , Makati, Metro Manila (Philippines), Jan 1990, 20 leaves Patent No: PH 23911 C Patent No: Philippine patent document 23911/c/

Notes: 7 ill

Language: English Summary Language: English

Place of Publication: Philippines

Document Type: Patent, Summary

Journal Announcement: 1803 Record input by Philippines

Abstract in English

An \*insect\* \*killing\* system is disclosed which comprises a circulation chamber within which \*steam\* is allowed to flow and circulate and a differential \*insect\* \*killing\* cell which forces the \*steam\* within the circulation chamber to flow there through. In this \*insect\* \*killing\* system, by guiding the \*steam\* in the circulation chamber maintained at a preselected temperature and humidity into the differential \*insect\* \*killing\* cell, the product temperature or fruit core temperature of raw fruit can be maintained at a desired level so as to \*kill\* out the maggots and eggs of \*insect\* \*pests\* such as orange flies and melon flies attacking the raw fruit contained within the differential \*insect\* \*killing\* cell.

**10/7/33 (Item 4 from file: 203)**

DIALOG(R)File 203:AGRIS

**10/3,K/1 (Item 1 from file: 9)**  
 DIALOG(R)File 9:Business & Industry(R)  
 (c) 2001 Resp. DB Svcs. All rts. reserv.

02581613 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**ENVIRONMENT-AFRICA: COUNTRIES AGREE TO PHASE OUT METHYL BROMIDE**  
 (African countries are trying to develop ways of getting rid of methyl bromide, which is reported to be one of the world's ozone-depleting substances)

Interpress Service, p N/A  
 September 14, 1999  
 DOCUMENT TYPE: Newsletter (United States)  
 LANGUAGE: English RECORD TYPE: Fulltext  
 WORD COUNT: 1007

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:  
 ...like dazomet, dichloropropene and metam sodium, there are several non-chemical techniques, which include integrated \*pest\* management practices such as sanitation, composting, planting of resistant varieties and \*steam\* treatment -- the injection of water vapor of 80 degrees C., in order to \*kill\* soil \*pests\* and diseases.

"All these are viable techniques. Countries are encouraged to identify, evaluate and adapt..."

**10/3,K/2 (Item 2 from file: 9)**  
 DIALOG(R)File 9:Business & Industry(R)  
 (c) 2001 Resp. DB Svcs. All rts. reserv.

02469953 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Wayne, N.J.-Based Pesticide Maker Sued over Florida Medfly Spray**  
 (Cheminova Inc, Cheminova Agro A/S (Denmark) and Cheminova Holding A/S are sued over Florida's use of Fyfanon ULV pesticide to kill Mediterranean fruit flies in 1997-98)

Record (The), p N/A  
 May 12, 1999  
 DOCUMENT TYPE: Regional Newspaper (United States)  
 LANGUAGE: English RECORD TYPE: Fulltext  
 WORD COUNT: 718

ABSTRACT:  
 ...federal district court in Tampa on Friday over Florida's use of Fyfanon ULV to \*kill\* Mediterranean fruit flies in 1997 and 1998. Lawyers for the plaintiffs -- a half dozen who...

...malaoxon and isomalathion, in temperatures above 77 degrees, and should not have shipped it to \*steamy\* south Florida in the summer of 1997. It also alleges the company should not have...

...or Medfly -- in a kumquat tree in Hillsborough County, Florida, in May 1997. Intent on \*destroying\* the \*pest\*, which officials feared would decimate the state's economically important citrus and tomato crops, the...

**10/3,K/3 (Item 1 from file: 16)**  
 DIALOG(R)File 16:Gale Group PROMT(R)  
 (c) 2001 The Gale Group. All rts. reserv.

06831928 Supplier Number: 57238319 (USE FORMAT 7 FOR FULLTEXT)  
**Routt National Forest.(Brief Article)**

Denver Business Journal, v51, n9, p16A  
Oct 22, 1999  
Language: English Record Type: Fulltext  
Article Type: Brief Article  
Document Type: Magazine/Journal; Trade  
Word Count: 77

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Forestry officials near \*Steamboat\* Springs are hoping for a cold snap. The temperature needs to drop down to 49 degrees below zero to \*kill\* off the spruce bark beetle. Officials say the beetle has infested a section of Routt...

...It's too costly to burn the area, clear-cut it or spray it with \*insecticide\*, so the weather may be the only weapon to use against the beetles.

**10/3,K/4 (Item 2 from file: 16)**

DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2001 The Gale Group. All rts. reserv.

01913796 Supplier Number: 42438225

**Pfizer Starts Up Advanced Fermentation Pilot Plant**  
Chemical & Engineering News, p25  
Oct 14, 1991  
Language: English Record Type: Abstract  
Document Type: Magazine/Journal; Refereed; Academic

ABSTRACT:

...6 miles of stainless steel pipe. Pfizer makes a wide range of fermentation products. Spent \*steam\* used for sterilization is condensed and disinfected. The chief concern is that some organism from...

...center are semduramicin ionophore antibiotic for prevention of coccidiosis and doramectin macrocyclic lactone glycoside to \*kill\* parasitic \*nematodes\*.

**10/3,K/5 (Item 3 from file: 16)**

DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2001 The Gale Group. All rts. reserv.

01695128 Supplier Number: 42110263

**Pest Firm Gives Bugs The Shivers**  
San Francisco Chronicle (CA), pC1,C4  
May 30, 1991  
Language: English Record Type: Abstract  
Document Type: Newspaper; Trade

ABSTRACT:

Tallon Termite & \*Pest\* Control (Long Beach, CA) is attracting customers who prefer nontoxic \*pest\* control with the company's 'Blizzard System.' The patented \*pest\* control method involves spraying liquid nitrogen into termite-infested wood. Other methods include trapping ants...

...designed to attract ants specifically, and ridding carpets of fleas by spraying them with hot \*steam\*. When the company first introduced its nontoxic system in 1987, competitors were sceptical. But Tallon...

...According to Jay Talon, CEO, the company guarantees its work for 2 years, like other \*exterminators\*.

**10/3,K/6 (Item 1 from file: 20)**

DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

07883403 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Georgetown, Ill., Florist's Business Still Blooming after 90 Years**

Jodi Heckel

KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS (NEWS-GAZETTE - CHAMPAIGN, ILL.)  
October 21, 1999

JOURNAL CODE: KNGC LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 665

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... when Roy and Mary Lou Burgoyne bought it.

One innovation Roy Burgoyne initiated was using \*steam\* sterilization to \*kill\* the weeds, \*insects\* and disease in the soil used in the greenhouses.

Mary Lou Burgoyne said the two...

**10/3,K/7 (Item 2 from file: 20)**

DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

06119429 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Duluth, Minn., to Treat Shippers' Garbage for Port**

Paul Adams

KRTBN KNIGHT-RIDDER TRIBUNE BUSINESS NEWS (DULUTH NEWS-TRIBUNE - MINNESOTA )

July 03, 1999

JOURNAL CODE: KDNT LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 677

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... small items.

The U.S. Department of Agriculture requires the waste to be incinerated or \*steamed\* to a temperature of 212 degrees for at least 30 minutes before it can be disposed of in a local landfill. The purpose is to \*kill\* off any foreign \*pests\* or diseases that might pose a risk to local plant or animal species.

Previously, such...

**10/3,K/8 (Item 3 from file: 20)**

DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

06064897 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**China Restores World's Tallest Wooden Buddha**

XINHUA (COMTEX)

July 05, 1999

JOURNAL CODE: WXIN LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 140

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... of 27.21 meters and weighs 110 tons.

Restoration experts reportedly treated the relic with \*steam\* generated by boiling medicinal herbs in order to \*kill\* \*insects\* and used

electric dryers to complete the process.  
A joint team of experts from the...

**10/3,K/9 (Item 4 from file: 20)**  
DIALOG(R)File 20:World Reporter  
(c) 2001 The Dialog Corporation. All rts. reserv.

02747185 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**FRUIT AND VEGETABLES / MINISTRY SETS THREE-YEAR GOAL: Bid to ensure export quality: New programme to help growers**  
from BANGKOK POST (BUSINESS SECTION), Page 10, September 09, 1998  
BANGKOK POST  
September 09, 1998  
JOURNAL CODE: FBKP LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 896

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... and western Europe preferring the frozen product.  
Mr Chavalvut said his department had built a \*steam\* fumigation plant to \*kill\* \*insects\* and their eggs before fruits were exported.  
This would make it easier to ship ripe...

**10/3,K/10 (Item 1 from file: 50)**  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03601778 CAB Accession Number: 982303076  
**Environmental hazards of fumigants: the need for safer alternatives.**  
Wheeler, W. B.; Kawar, N. S.  
IFAS, Food & Environmental Toxicology Laboratory, University of Florida, FL, USA.  
Conference Title: Pesticides and the environment. Proceedings of the Sixth Arab Congress of Plant Protection, Beirut, Lebanon, 27-31 October 1997.  
Arab Journal of Plant Protection vol. 15 (2): p.154-162  
Publication Year: 1997  
ISSN: 0255-983X --  
Language: English Summary Language: arabic  
Document Type: Conference paper; Journal article

--  
... years. A major use is when soil-applied to reduce or eliminate soil borne diseases, \*insects\*, and weeds, which if not controlled would adversely affect the growth and production of agricultural...

... have great advantages in that they effectively penetrate the materials being treated, are efficient in \*killing\* \*pests\* and usually dissipate leaving no hazardous residues. However, fumigants are toxic to humans and animals...

... years. Potential replacements include the use of less hazardous chemicals, non-chemical soil disinfection using \*steam\* or soil solarization, and applying other practices, such as biological control and crop rotation, to reduce \*pest\* infestation.

**10/3,K/11 (Item 2 from file: 50)**  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03553248 CAB Accession Number: 982401409

**Investigations of phase soil cooling.**

Original Title: Dirvos ausimo fazes tyrimai.

Sirvydas, P. A.; Stepanas, A.

Lithuanian University of Agriculture, Raudovaris, 4320 Kauno r., Lithuania.

Zemes Uolio Inzinerija, Mokslo Darbai vol. 29 (2): p.33-42

Publication Year: 1997 --

Language: Lithuanian Summary Language: english; russian

Document Type: Journal article

--  
The majority of plant diseases and \*pests\* are \*destroyed\* at temperatures of 82 deg C. During soil sterilization, soil reaches a temperature of 100...

... falls very slowly. Experimental investigations of phase soil cooling showed that an hour after the \*steam\* is turned off, the temperature of the soil is 97-80 deg C, meaning that...

10/3,K/12 (Item 3 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

03255710 CAB Accession Number: 961608066

**Return to resistance: breeding crops to reduce pesticide dependence.**

Robinson, R. A.

xv + 480 pp.

Publication Year: 1996

Publisher: agAccess -- Davis, California, USA

ISBN: 0-932857-17-5

Language: English

Document Type: Book

--  
...knowledge about these subjects, this book examines how the problem of crop parasites, which currently \*destroy\* about one-fifth of all crop production worldwide, can be largely overcome by breeding crops...

... approach to breeding crops and advocates horizontal resistance as a means of providing a largely \*pest\*-free and pesticide-free agriculture. The book is organized into 3 sections, the first of...

... cartels). The second section gives examples of crops which have been successfully bred to overcome \*pests\* and diseases (including potato, maize, coffee and sugarcane), gives examples of crops which have been...

... in the past for horizontal resistance, and examines why the Green Revolution ran out of \*steam\*. The third section advocates the formation of plant breeding clubs to undertake horizontal resistance breeding...

10/3,K/13 (Item 4 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

03049631 CAB Accession Number: 952306922

**Evaluation of a Swedish steam-dryer for treatment of *Bursaphelenchus xylophilus* in pine chips.**

Dwinell, L. D.; Magnusson, C.; Tomminen, J.

USDA Forest Service, Southeastern Forest Experiment Station, Forestry Sciences Laboratory, 320 Green Street, Athens, GA 30602-2044, USA.

Bulletin OEPP vol. 24 (4): p.805-811  
 Publication Year: 1994  
 ISSN: 0250-8052 --  
 Language: English Summary Language: french; russian  
 Document Type: Journal article

--  
 A \*steam\*-dryer, designed and manufactured in Sweden, was evaluated for \*destroying\* *Bursaphelenchus xylophilus* in pine chips from southern USA. In a trial, pine chips were treated...

...deg C in 5 min at low pressure. Samples of pine chips were assayed for \*nematodes\* in laboratories in USA, Sweden, and Finland. No \*nematodes\* of any species were recovered from any of the treated pine-chip samples. Large and heterogeneous pieces of wood in the treated samples were also \*nematode\* -free. The apparatus was a prototype capable of handling about 400 kg h-1. The...

10/3,K/14 (Item 5 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

02957943 CAB Accession Number: 952300033  
**Diagnosis of apple replant problems in New York orchard soils and evaluation of nematode-suppressive cover crops.**  
 Pruyne, P. T.; Merwin, I. A.; Mullin, P. G.; Gibson, D. M.  
 Department of Fruit and Vegetable Science, Cornell University, Ithaca, NY, USA.  
 Acta Horticulturae (No.363): p.121-128  
 Publication Year: 1994  
 ISSN: 0567-7572 --  
 Language: English  
 Document Type: Conference paper; Journal article

--  
 Nearly half of the \*tree\*-\*fruit\* growers surveyed in New York, USA, reported serious problems in replanting their orchards. Past research...

... alternative treatment strategies for ORD. Several cover crops or cultural practices were evaluated for controlling \*fruit\*-\*tree\* root pathogens associated with ORD and the mechanisms of \*nematode\* suppression by certain plants were investigated. Soils were sampled from orchards in the major fruit-growing regions of New York, identifying and quantifying plant parasitic \*nematodes\* at each site. ORD was then assessed using a diagnostic bioassay comparing dry weights of apple seedlings grown for 10 weeks in \*steam\*-pasteurized (PS) compared with untreated field soil (FS). Seedling dry weight ratios (PS:FS) ranged...

... non-treated soils, in association with substantial populations of *Pratylenchus penetrans* and/or *Xiphinema* spp. \*nematodes\*. Five ORD soils were selected for further evaluation of the effects of *Tagetes patula* cv ...

...breakdown of each cover crop. Preliminary studies with aqueous leachates showed no significant differences in \*nematode\* mortality in cover crop leachates compared with water controls. This paper was presented at the...

10/3,K/15 (Item 6 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

02603356 CAB Accession Number: 921164970

**Floral volatiles of Tanacetum vulgare L. attractive to Lobesia botrana Den. et Schiff. females.**

Gabel, B.; Thiery, D.; Suchy, V.; Marion-Poll, F.; Hradsky, P.; Farkas, P.

Laboratoire de Neurobiologie Comparee des Invertebres, INRA-CNRS (UA 1190), B.P. 23, Bures sur Yvette 91440, France.

Journal of Chemical Ecology vol. 18 (5): p.693-701

Publication Year: 1992

ISSN: 0098-0331 --

Language: English

Document Type: Journal article

--  
Lobesia botrana is a major \*pest\* of grapes in Europe. Females are attracted to tansy (*Tanacetum vulgare*), a non-host plant, which is a common weed in Slovakian \*vineyards\*. A \*steam\* distillate extract of tansy flowers was analysed using GC-EAG techniques to screen constituents detected...

... piperitone) produced an EAG response in more than 70% of the females (N = 17). The \*steam\* distillate of tansy, as well as a synthetic blend of identified compounds, released consistent attraction...

... studies using bait traps. The use of nonhost plants and host plant odours in integrated \*pest\* management is discussed.

10/3,K/16 (Item 7 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

02481015 CAB Accession Number: 910655701

**Subsistence agriculture improvement: manual for the humid tropics.**

Haupstr. 9, W-7401 Nehren, Germany.

(Ed. 2): xiv + 231 pp.

Publication Year: 1990

Editors: Goeltenboth, F.; Dalpadado, V. E.; Howcroft, N. H. S.; Louman, B.; Samana, F.; Siki, B.; Nalu, G.

Publisher: Wau Ecology Institute -- Wau, Papua New, Guinea

ISBN: 9980-73-001-3 (Papua New Guinea); 3-8236-1157-7 (Germany)

Language: English

Document Type: Book

--  
... of a nursery; preparation of compost bricks; production/construction of banana-fibre-pots, a soil-\*steamer\* -drum, an appropriate water-can-baffle, a bamboo-marker, an A-frame and a simple...

... showing the altitudinal limits of crops, and data on the food value, ecology, cultivation, and \*pests\* and diseases of 31 food crops, including vegetables, root crops, \*fruit\* \*trees\* and spices). The last section, 'Information on subsistence agriculture improvement', discusses: subsistence agriculture and soil...

... the main genera used - Casuarina, Albizia, Leucaena, Acacia and Calliandra); simple organic plant protection from \*pests\* and diseases (prevention, using agronomic techniques and resistant plants, and control, using biological and physical...

10/3,K/17 (Item 8 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

02170844 CAB Accession Number: 891122223

**Crickets in the greenhouse.**

Shikov, E. V.

Zashchita Rastenii (Moskva) (No. 3): p.54-55

Publication Year: 1987 --

Language: Russian

Document Type: Journal article

--  
 ... lays up to 170 eggs, and various stages are present simultaneously. In the summer the \*pest\* transfers freely to and from the land outside, especially if it is weedy. Control is aimed at preventing entry of the \*pest\*. All containers are disinfected with a 2% formalin solution or fumigated with a mixture of formalin and potassium permanganate. Soil is \*steamed\* to \*destroy\* the eggs. At the end of cultivation, premises are carefully treated with a 50% Actellic...

10/3,K/18 (Item 9 from file: 50)

DIALOG(R)File 50:CAB Abstracts

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01871581 CAB Accession Number: 870617001

**Heat-treating wood chips: a possible solution to pine wood nematode contamination.**

Kinn, D. N.

SFES, USDA For. Serv., 2500 Shreveport Highway, Pineville, LA 71360, USA.

Tappi Journal vol. 69 (1): p.97-98

Publication Year: 1986

ISSN: 0734-1415 --

Language: English

Document Type: Journal article

--  
 ...various locations in a chip pile in Alabama. All 4 samples were found to contain \*nematodes\*; at least 2 contained the pine wood \*nematode\* *Bursaphelenchus xylophilus* which is responsible for pine wilt disease. Other \*nematodes\* were *Cephaloboides* sp., *Mononchoides* sp., *Rhabdotalimus* sp. and species in the family Rhabditidae. Samples of chips were then exposed to dry heat or \*steam\* or immersed in water at temp. ranging from 40 to 135 deg C for different...

...to 135 deg C had to be applied for 8-10 min in order to \*kill\* the \*nematodes\* ; these temperatures are considered too high to be practical and probably have a deleterious effect on chip quality. \*Steam\* heat was successful at lower temp. and for shorter periods (2 min at 85 deg...

10/3,K/19 (Item 10 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

01840945 CAB Accession Number: 870840872

**Survival of *Bursaphelenchus xylophilus* in wood chips.**

Kinn, D. N.

Southern Forest Exper. Sta., USDA Forest Serv., 2500 Shreveport Highway, Pineville, LA 71360, USA.

Bulletin OEPP vol. 16 (3): p.461-464

Publication Year: 1986

ISSN: 0250-8052 --

Language: English Summary Language: french; russian

Document Type: Journal article

--  
Treatments to \*kill\* *B. xylophilus* in infested logs or other material to be exported to areas free of the pinewood \*nematode\* are described. These include dry heat at temperatures of 120-135 deg C for 8-10 min, \*steam\* heat for 2 min at 85 and 90 deg C, 4 min at 80 deg...

10/3,K/20 (Item 11 from file: 50)

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01603893 CAB Accession Number: 850329706

**(Soil) steaming with year-round chrysanthemums. Influence on growth and yield is slight.**

Original Title: Stomen bij jaarrondteelt chrysant. Invloed op groei en produktie gering.

Runia, W. T.; Hoeven, A. P. van der

Proefstation voor de Tuinbouw onder Glas, Naaldwijk, Netherlands.

Vakblad voor de Bloemisterij vol. 39 (34): p.34...37

Publication Year: 1984

ISSN: 0042-2223 --

Language: Dutch

Document Type: Journal article

--  
\*Steaming\* is now the usual method of soil disinfection for Dutch glasshouse growers, following a ban...

...methyl bromide. Data are presented from trials on 4 commercial holdings, investigating the effects of \*steaming\* for 1 or 6 h in uncultivated soil or for 6 h in cultivated soil...

...soils were heavy loams, and one was a light loam and one a clay. With \*steaming\* for 1 h the soil temperature below 10 cm was not raised enough to \*kill\* the soil fungi, but with 6 h of \*steaming\* the soil was effectively disinfected to a depth of 20 cm. The soil Mn content was also raised by \*steaming\* for 6 h, more so in the heavier soils and particularly in cultivated soil. Soil...

... or flower vase life; untreated plots of the 4 soils were not significantly infested with \*nematodes\* or fungi so \*pest\* and disease control could not be assessed in this study.

10/3,K/21 (Item 12 from file: 50)

DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

01003316 CAB Accession Number: 810580731

**Blumea species (Compositae): insecticides from plants.**

Dongre, T. K.; Rahalkar, G. W.

Biology and Agriculture Division, Bhabha Atomic Research Centre, Trombay, Bombay-40084, Maharashtra, India.

Journal of Communicable Diseases vol. 12 (1): p.39-41

Publication Year: 1980

ISSN: 0019-5138 --

Language: English

Document Type: Journal article

--  
... kerosene and acetone extracts of *B. densiflora* have been tested (although unsuccessfully) against Diptera, the \*insecticidal\* activity of

3 further Blumea species common in the Trombay area of Bombay, India, was

... instar larvae of Culex quinquefasciatus Say (pipiens fatigans Wied.). An oily residue separated from the \*steam\*-distillate of the leaves of B. eriantha gave complete \*kill\* after 24 h at 200 p.p.m., a similar residue from B. oxydonata gave...

**10/3,K/22 (Item 13 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00758795 CAB Accession Number: 790854912

**Physical methods of control.**

Southey, J. F.

Plant Path. Lab., Harpenden, Herts, UK.

Plant nematology

p.303-313

Publication Year: 1978

Editors: J.F. Southey

Publisher: HM Stationery Office. -- London, UK

Language: English

Document Type: Miscellaneous

--  
 Heat treatment of soil for \*nematode\* control in protected cultivation includes partial sterilization by \*steam\*, electrical heating, short-wave diathermy and pre-heating and 'cooking-out' of mushroom composts. Hot water treatment, used for \*killing\* \*nematodes\* in infested plant material, usually bulbs, is discussed in detail and hot-air, electrical, radiation...

**10/3,K/23 (Item 14 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00720023 CAB Accession Number: 790374760

**Determining the cause and extent of apple, cherry, and pear replant disease under controlled conditions.**

Mai, W. F.; Abawi, G. S.

Cornell Univ., Ithaca, NY, USA.

Phytopathology vol. 68 (11): p.1540-1544

Publication Year: 1978

ISSN: 0031-949X --

Language: English

Document Type: Journal article

--  
 A replant disease of \*fruit\* \*trees\* was reproduced under growth chamber conditions. Apple, pear and cherry seedlings, grown in nontreated orchard  
 ...

... plant growth and development over the nontreated check, it was inferior to the chloropicrin and \*steam\* treatments. Growth response of all seedlings to soil treatments was greatest in the apple replant...

...7.2, 5.5 and 5.7. It is considered that the replant disease of \*fruit\* \*trees\* in NY is nonspecific and that biological agents in addition to plant parasitic \*nematodes\* are involved. ADDITIONAL ABSTRACT: This paper reports an investigation of replant disease, which is non-specific and involves several organisms including \*nematodes\*, of apple, pear and

cherry seedlings in New York State, USA. *Pratylenchus*, *Paratylenchus* and *Xiphinema* spp. were the plant parasitic \*nematodes\* most frequently found in the soils. Population densities of *P. penetrans* and *Paratylenchus* (mostly *P...*

... *Xiphinema americanum* populations were larger in cherry than in apple or pear soils. Treatment with \*steam\*, chloropicrin (421 l/ha) or D-D (421 l/ha) reduced \*nematode\* populations and increased plant growth. Treatment with D-D was not as effective against *Paratylenchus* spp. as the other treatments. After 12 weeks of growth of the seedlings \*nematode\* populations remained low in the treated soils.

10/3,K/24 (Item 15 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00279513 CAB Accession Number: 750822993  
**Studies on the nematodes causing crop losses of cultivated mushroom, *Agaricus bisporus* (Lange) Sing.**  
 Han, Y. S.; Park, J. S.; Kim, D. S.; Shin, K. C.  
 Institute of Agricultural Science, Suweon, S.Korea.  
 Research Reports of the Office of Rural Development, Soil Science,  
 Fertilizer, Plant Protection and Micrology vol. 16 p.35-44  
 Publication Year: 1974 --  
 Language: English Summary Language: korean  
 Document Type: Journal article

-- Extraction and identification of \*nematodes\* from samples of compost and casing material from 35 mushroom farms in South Korea revealed...

... high levels. The effects on the mycelia were considered to be due to accumulation of \*nematode\* excretory products, not to \*nematode\*-induced pH changes. Both *Aphelenchooides* and *Rhabditis* significantly reduced the numbers of fruiting bodies produced. The main sources of the \*nematode\* infestation were found to be the compost and casing materials. Experiments on the thermal death point of *Rhabditis* indicate that \*steam\* sterilization of soil for 30 min. and holding compost at 70 deg C for 6 ...

... survey of 35 mushroom farms showed *Aphelenchooides* sp. and *Rhabditis* sp. to be the commonest \*nematodes\*. Both \*destroyed\* the mushroom mycelium and significantly reduced yields. The main sources of infestation were compost and...

10/3,K/25 (Item 16 from file: 50)  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00245705 CAB Accession Number: 740518464  
**A method to rear *Stomoxys nigra* Macquart (Diptera, Muscidae) in the laboratory.**  
 Ramsamy, M.  
 Ministry of Agriculture and Natural Resources, Mauritius.  
*Revue Agricole et Sucriere de l'Ile Maurice* vol. 51 (4): p.236-241  
 Publication Year: 1972  
 ISSN: 0370-3576 --  
 Language: English Summary Language: french  
 Document Type: Journal article

--

... to 20 parts grass was found to give excellent results. When it was treated with \*steam\* or 0.2% formalin to \*kill\* entomophagous \*nematodes\* of the genus *Rhabditis*, over 60% of larvae reared in it gave rise to adults...

**10/3,K/26 (Item 17 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00133293 CAB Accession Number: 740320906  
**Steam sterilization of tomato greenhouse soils.**  
 Farley, J. D.; Oakes, G.; Jaberg, C.  
 Research Summary, Ohio Agricultural Research and Development Center  
 vol. 43 (No. 73): p.21-24  
 Publication Year: 1974 --  
 Language: English  
 Document Type: Journal article

--  
 Soil temperatures during and after winter and summer \*steaming\* were recorded in 9 commercial glasshouses. The critical temperature (140 deg F) to ensure the destruction of \*insect\* \*pests\*, weeds and disease pathogens (apart from TMV) was reached after only 3 h in summer \*steaming\* and after 5 h in winter. During the summer, temperatures of 200 deg or above were reached after 3.5 h and this would be sufficient to \*destroy\* TMV. If TMV-resistant tomato cvs are grown considerable savings in fuel costs can be effected by reducing the \*steaming\* time and covering the treated soil with a tarpaulin to retain the heat.

**10/3,K/27 (Item 18 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts  
 (c) 2001 CAB International. All rts. reserv.

00068967 CAB Accession Number: 730807803  
**Experiments with fungicides and insecticides in fruit and gardening crops in 1971.**  
 Original Title: Forsoeg med plantebeskyttelsesmidler i frugtavl og gartneri 1971.  
 Hansen, T.; Rasmussen, A. N.; Schadegg, E.  
 State Plant Pathology Inst., Lyngby, Denmark.  
 Tidsskrift for Planteavl vol. 76 (5): p.682-706  
 Publication Year: 1972  
 ISSN: 0040-7135 --  
 Language: Danish Summary Language: english  
 Document Type: Journal article

--  
 ... on *Ficus benjamina*. *Meloidogyne* on cucumbers and tomatoes seemed to be slightly better controlled by \*steaming\* the soil than by treatment with methyl bromide. 'dagger'. ADDITIONAL ABSTRACT: Details are given of tests carried out at the State Plant Pathology Institute, Denmark, in 1971 with fungicides and \*insecticides\* (see preceding abstract) against \*pests\* of fruit and garden crops, including some against *Aphis pomi* Deg. on apple, *Hoplocampa minuta*...  
 ... *rubi* (Hbst.) on *Cecidophyopsis* (*Eriophyes*) *ribis* (Westw.) on black currant, *Panonychus* (*Metatetranychus*) *ulmi* (Koch) on \*fruit\* \*trees\* and *Tetranychus urticae* Koch on glasshouse crops.

**10/3,K/28 (Item 19 from file: 50)**  
 DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00031139 CAB Accession Number: 730306726

**Studies on the cause of specific replant disease of \*fruit\* \*trees\*. IV.  
The effect of different \*steaming\* temperatures on free-living \*nematodes\*  
in sick soil.**

Original Title: Untersuchungen über die Ursache der Bodenmudigkeit bei Obstgehölzen. IV. Einfluss verschiedener Dampftemperaturen auf freilebende Nematoden in mudem Boden.

Winkler, H.; Otto, G.

Institut für Obstforschung, Dresden-Pillnitz, German Democratic Republic.

Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene vol. 127 (7/8): p.783-788

Publication Year: 1972 --

Language: German Summary Language: english

Document Type: Journal article

**Studies on the cause of specific replant disease of \*fruit\* \*trees\*. IV.  
The effect of different \*steaming\* temperatures on free-living \*nematodes\*  
in sick soil. --**

10/3,K/29 (Item 20 from file: 50)

DIALOG(R)File 50:CAB Abstracts

(c) 2001 CAB International. All rts. reserv.

00025206 CAB Accession Number: 720301800

**The great wine blight.**

Ordish, G.

237 pp.

Publication Year: 1972

Publisher: -- London, U.K., J.M. Dent & Sons Ltd.,

ISBN: 0460039482

Language: English

Document Type: Book

-- ... tiny drop on both occasions, had no remedy been devised for the devastation of vinifera \*vineyards\* by Phylloxera vastatrix. George Ordish tells us all about it from A to Z, starting with the first identification on a European vine of this revolting \*insect\* in a greenhouse at Hammersmith in 1863, it having, thanks to \*steam\* navigation, successfully crossed the Atlantic alive. Next we hear of its devastating effect on the

...

... taken against it, in fact its history to the end. It is indeed a horrible \*insect\* and, at least to one who is not an entomologist, it is not a subject...

... show a certain measure of success was the unpleasant and highly dangerous carbon bisulphide. This \*insecticide\* was, however, evanescent. It killed the \*insect\* and was gone and the vine was back at square one ready for fresh infection...

10/3,K/30 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2001 The Gale Group. All rts. reserv.

10293973 SUPPLIER NUMBER: 20858888 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Filth and food safety.**

Ziobro, George C.

Chemistry and Industry, n11, p428(4)

June 1, 1998

ISSN: 0009-3068 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 2492 LINE COUNT: 00196

Some people consider the contamination of food by \*insects\* or animals simply as aesthetic problems, but our ancient ancestors realised that contaminated food could...

...a creature may fall will be unclean; be it oven or stove, it must be \*destroyed\*. The biblical prohibitions are paralleled by the wisdom in Native American cultures of the New...

...or clothing that have been defiled by rodents. In the Orient, Chinese cooking practices involve \*steaming\*, boiling or frying all foods; very few items are ever served raw. Over the years...

**10/3,K/31 (Item 2 from file: 148)**

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2001 The Gale Group. All rts. reserv.

10163796 SUPPLIER NUMBER: 20161594 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Mining ethical issues: the new prohibitionists.(Cover Story)**

Maxey, Margaret N.

E-MJ - Engineering & Mining Journal, v198, n10, pWW34(5)

Oct, 1997

DOCUMENT TYPE: Cover Story ISSN: 0095-8948 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 4766 LINE COUNT: 00387

... imperiled human health and public safety - and that the quality of our environment has been \*destroyed\* by industrial pollutants and hazardous wastes - we would do well to revisit the historical record...

...on the GRAS list today) or by drying it in the sun where maggots and \*insects\* competed for survival. Women's lives from dawn to dusk were dogged by drudgery. As is the case today, the introduction of new technologies in the past - including the \*steam\* locomotive and even the baby carriage - were greeted with pious outcries protesting against these ominous...

**10/3,K/32 (Item 3 from file: 148)**

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2001 The Gale Group. All rts. reserv.

09325267 SUPPLIER NUMBER: 19099696 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Hot idea for area bugged by fire ants.**

Brezonick, Mike

Diesel Progress Engines & Drives, v62, n12, p44(2)

Dec, 1996

ISSN: 1040-8878 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 869 LINE COUNT: 00066

... burner. Within a matter of seconds, the water is heated to a temperature sufficient to \*kill\* the \*insects\*, usually 210 (degrees) F. The newest models allow temperatures as high as 350 (degrees) F, which also allows the system to generate \*steam\* and hot water that can be used to eliminate unwanted vegetation. "We have found the product is wonderful for weed control," noted Dorsett. "Say when he's not \*killing\* fire ants, a farmer wants to clean up a fence line and doesn't want to use poison. The combination of hot water and \*steam\* works fine to \*kill\* the weeds and

again, there's not the problems that exist with putting poison on...

**10/3,K/33 (Item 4 from file: 148)**  
 DIALOG(R)File 148:Gale Group Trade & Industry DB  
 (c)2001 The Gale Group. All rts. reserv.

06448086 SUPPLIER NUMBER: 13808385 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The wisdom of humble homes. (architecture in India)**  
 Engel, Peter  
 Technology Review, v96, n2, p38(12)  
 Feb-March, 1993  
 ISSN: 0040-1692 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
 WORD COUNT: 5721 LINE COUNT: 00425

... centuries they had taught their children to forage for nuts and berries, to track and \*kill\* wild boar and spotted deer, weave baskets, \*steam\* rice in a section of bamboo, smoke out the inside of a hut to keep it free of mold and \*insects\*, and build an encampment so it would not be attacked by migrating elephants. Along the...

**10/3,K/34 (Item 5 from file: 148)**  
 DIALOG(R)File 148:Gale Group Trade & Industry DB  
 (c)2001 The Gale Group. All rts. reserv.

05815551 SUPPLIER NUMBER: 12013316 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**TOXICOLOGY REVIEW PROMPTS CHANGES IN STRUCTURAL FUMIGATIONS**  
 PR Newswire, 0402A4662  
 April 2, 1992  
 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
 WORD COUNT: 3009 LINE COUNT: 00272

... certain nursery stock be grown on soil treated in an approved manner. This applies to \*fruit\* and nut \*trees\*, grapevines, berry vegetable plants, kiwi and other nursery stock sold for on-farm planting. Since...

...with methyl bromide under tarp. (Soil in beds, flats or containers may be treated with \*steam\*.)

Q. Why is the state taking regulatory action against structural uses of methyl bromide, and...

**10/3,K/35 (Item 1 from file: 160)**  
 DIALOG(R)File 160:Gale Group PROMT(R)  
 (c) 1999 The Gale Group. All rts. reserv.

01439562  
**East meets west in city-based rattan importer.**  
 TULSA WORLD (OK) May 18, 1986 p. SecG,11

... then carried down the mountains on water buffalo, and deep fried in coconut oil to \*kill\* \*insects\* and other organisms. Water buffalo then carry the wood to the factory, where it is dried in the sun, cut, \*steamed\*, bent and pressed to make tables, loveseats, chaises, bookshelves, etc. A simple chair takes 2...

**10/3,K/36 (Item 1 from file: 248)**  
 DIALOG(R)File 248:PIRA  
 (c) 2001 Pira International. All rts. reserv.

00142210 Pira Acc. Num.: 6810888 Pira Abstract Numbers: 01-86-00911  
**Title: USING SODIUM N-METHYLDITHIOCARBAMATE TO EXTERMINATE THE PINE WOOD NEMATODE IN WOOD CHIPS**

Authors: Kin D N; Springer E L

Source: Tappi J vol. 68, no. 12, Dec. 1985, p. 88

ISSN: 0734-1415

Publication Year: 1985

Document Type: Journal Article

Language: English

...Abstract: chips from the USA and Canada had been found to be contaminated with the pinewood \*nematode\*, *Bursaphelenchus Xylophilus* Nickle, and in September 1984, Finland banned imports of chips from the USA

...

... the form of fuel logs, roughwood and pulpwood from North America and Japan. The pinewood \*nematode\* is endemic in North America and native pines are partly resistant to the pine wilt disease which it causes. \*Steaming\* or hot water immersion will \*kill\* \*nematodes\* within wood chips, but has the disadvantage of increasing the chip weight. A study is reported that shows conditions under which pinewood \*nematodes\* may be killed in US southern pine chips, but immersion in a solution of 0...

**10/3,K/37 (Item 1 from file: 635)**

DIALOG(R)File 635:Business Dateline(R)

(c) 2001 ProQuest Info&Learning. All rts. reserv.

0722956 96-81454

**The greening of Valhalla**

Allar, Bruce

Louisville (Louisville, KY, US), V47 N8 p48

PUBL DATE: 960800

WORD COUNT: 3,283

DATELINE: Louisville, KY, US, South Central

TEXT:

...But this is a fragile beauty. Bent grass, particularly this far south, is susceptible to \*insects\* and diseases. It's a heavy-thatch producer, building up a brown, spongy area of dead matte between the green grass and the soil that invites more \*insects\* and disease. And like any northern golfer coming in to play 18 holes in our mid-summer \*steambox\*, it tends to dehydrate in Louisville, a condition that can burn it up, even \*kill\* it.

The biggest threats to bent grass in this region come, coincidentally, during the same...

**10/3,K/38 (Item 2 from file: 635)**

DIALOG(R)File 635:Business Dateline(R)

(c) 2001 ProQuest Info&Learning. All rts. reserv.

0188797 91-10012

**Agritope to Rescue Oregon's Vintners**

Eisler, Gary

Oregon Business (Portland, OR, US), V14 N1 s1 p39

PUBL DATE: 910100

WORD COUNT: 607

DATELINE: Beaverton, OR, US

TEXT:

...the first vines were planted in 1966 -- and because of careful efforts to keep the \*pest\* out. The bug is often carried on farm equipment and the tires of vehicles moving from one \*vineyard\* to another. Oregon's \*vineyards\* are fairly dispersed, making the louse's accidental travel from one \*vineyard\* to another unlikely. Also, growers here frequently \*steam\* clean equipment before they use it in a \*vineyard\*.

In the past, growers tried fumigating the vines or flooding the vineyards, but there is...

**10/3,K/39 (Item 3 from file: 635)**  
 DIALOG(R)File 635:Business Dateline(R)  
 (c) 2001 ProQuest Info&Learning. All rts. reserv.

0024217 87-02900  
**Business Is Mushrooming in the Mushrooming Business**  
 Hamilton, Robert A.  
 The Business Times (East Hartford, CT, US), V8 N6 s1 p1  
 PUBL DATE: 861200  
 WORD COUNT: 2,841  
 DATELINE: Franklin, CT, US

TEXT:

...use anywhere. A layer of salt on the mats in each doorway is used to \*kill\* the chief \*pest\* of mushrooms -- the \*nematode\*, a microscopic worm. Trays and other handling materials are sterilized with 160-degree \*steam\*. Even the spent compost is recycled: Earthgro, a company which is not affiliated with the...

**10/3,K/40 (Item 1 from file: 636)**  
 DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
 (c) 2001 The Gale Group. All rts. reserv.

04143486 Supplier Number: 54354736 (USE FORMAT 7 FOR FULLTEXT)  
**Scientists Looking for Methyl Bromide Alternatives.**  
 Ozone Depletion Network Online Today, pNA  
 April 12, 1999  
 Language: English Record Type: Fulltext  
 Document Type: Newsletter; Trade  
 Word Count: 271

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...soil and structural fumigant, a post-harvest storage treatment and to control a variety of \*pests\*. More than 40 million pounds per year are used by growers in the U.S...

...known as Telone), chloropricrin, metam sodium and methyl iodide. Other nonchemical alternatives include crop rotation, \*steam\*, solarization and organic matter. So far, Telone is one of the most promising chemical options...

...Valley where summer temperatures reach above 100 degrees and can cook the soil enough to \*kill\* pathogens and weeds without affecting crop yields. (AP: 4/9)

**10/3,K/41 (Item 2 from file: 636)**  
 DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2001 The Gale Group. All rts. reserv.

03885626 Supplier Number: 48493675 (USE FORMAT 7 FOR FULLTEXT)

**-ECONOMIC RESEARCH SERVICE: Agricultural outlook -- Part II of IV**

M2 Presswire, pN/A

May 22, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 5786

... on food products as a disinfectant wash or spray. When dispersed into water, ozone can \*kill\* bacteria--like E. coli O157:H7--faster than traditionally used disinfectants, such as chlorine. Ozone also \*kills\* viruses, parasites, and fungi. The U.S. Environmental Protection Agency, in conjunction with the Safe...

...be applied to sanitize food storage rooms and packaging materials, which may help to control \*insects\* during storage of foods and prevent spoilage of produce during shipping. Gaseous ozone is also...

...approved use for meat. Methyl bromide has commonly been used as a fumigant to prevent \*insect\* infestation of commodities such as grapes, raisins, cherries, nuts, and grains, but its use is the appearance, taste, texture, or nutrient content of the food. These methods include \*steam\* pasteurization, used principally in meat processing where beef carcasses are exposed to \*steam\* for short periods of time; flash pasteurization, a heating process to \*kill\* bacteria in juice; and irradiation, which uses low-dose radiation to treat meats, fruits, vegetables...

...a nonthermal method of disinfecting food, ozonation reportedly alters taste little, unlike some heat-based \*steam\* and flash pasteurization systems that cook the product. Further, in some foods, ozone proponents indicate...

...to install an ozone system that is intended to replace a combined chlorine wash and \*steam\* pasteurization process. ... But Adoption May Be Slow Having achieved GRAS status, will ozone be widely...

...given the choice of chlorine, irradiation, or ozone processes (other disinfecting processes such as steam \*pasteurization\* and hot-water rinses were not included in the survey). The disinfecting ability of ozone...

...or proposed to improve food safety. Chlorine is the most commonly used chemical to kill \*pathogens\* on food, but chlorine dioxide, hypochlorite, and trisodium phosphate also have been studied for use...radiation or electron beams, was approved by the Food and Drug Administration in December 1997. \*Steam\* pasteurization, flash pasteurization, and ultraviolet radiation are additional methods that can sanitize food. Each method...

**10/3,K/42 (Item 3 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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03663903 Supplier Number: 47891793 (USE FORMAT 7 FOR FULLTEXT)

**Steam System Can Sterilize Small Soil Plots**

Ozone Depletion Network Online Today, pN/A

August 5, 1997

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 247

We've used this system to \*kill\* molds, fungi, \*nematodes\*, weed seeds, and other soil pathogens that attack cut flowers, bedding plants, potted plants and vegetables," said John Gray, marketing manager of the Beresford, SD-based Sioux \*Steam\* Cleaner Corporation.

"It is also excellent for sterilizing nursery tools, pots, floors and other surfaces..."

10/3,K/43 (Item 4 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2001 The Gale Group. All rts. reserv.

01826554 Supplier Number: 43102000 (USE FORMAT 7 FOR FULLTEXT)

**Methyl Bromide Steps Into the Spotlight**

Global Environmental Change Report, v4, n12, pN/A

June 26, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 1454

... or in some cases irradiated instead of fumigated. Biological controls may be used to eliminate \*pests\* in stored grain, or to control \*nematodes\* in soils. Soil solarization (a practice whereby fields are covered in clear plastic, heating the soil enough to \*kill\* \*nematodes\*), \*steam\* sterilization of soils, and less-intensive agricultural practices could also eventually eliminate the need for...  
?

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01019925 AGRIS No: 84-095600

**Elimination of the risk resulting from pathogenic microorganisms  
[Salmonella, E. coli and Staphylococcus aureus] in some Philippine fishery  
products by gamma irradiation**

Gonzales, O.N.; Sanchez, F.C.; Vista, J.B. (National Inst. of Science  
and Technology, Taft Ave., Manila (Philippines))

Journal: Philippine Journal of Science, Jul-Dec 1981, v. 110(3-4) p.

45-53

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Issued Jun 1983

Language: English

Place of Publication: Philippines

Document Type: Journal Article, Summary

Journal Announcement: 1010 Record input by AIBA (Agr Information  
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Abstract in English

Results of the study showed that irradiation could in fact protect from  
microorganisms the smoked and \*steamed\* fishery products and prolong their  
storage life despite their relatively low salt and high moisture content.  
Furthermore, the process \*destroyed\* much of the spoilage agents such as  
bacteria, \*insects\*, parasites, molds and yeasts. Irradiation at 5 KGy  
level did not affect significantly the organoleptic properties of these  
food products.

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